

**AN ETHNOGRAPHIC INVESTIGATION
INTO THE RELATIONSHIP BETWEEN
MENTAL MODELS AND THE
IMPLEMENTATION OF
TOTAL QUALITY MANAGEMENT**

1994

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TABLE OF CONTENTS

	PG
SECTION 1: OVERVIEW	1
SECTION 2: DESCRIPTION OF THE PROBLEM SITUATION	4
SECTION 3: FORMULATION OF THE HYPOTHESIS	7
SECTION 4: LITERATURE REVIEW: CROSBY'S QUALITY PHILOSOPHY AND PRINCIPLES	9
SECTION 5: LITERATURE REVIEW: DEMING'S QUALITY PHILOSOPHY AND PRINCIPLES	18
SECTION 6: LITERATURE REVIEW: TOTAL QUALITY MANAGEMENT	24
SECTION 7: LITERATURE REVIEW: TOTAL QUALITY MANAGEMENT AND SYSTEMS THINKING	32
SECTION 8: SYNTHESIS	44
SECTION 9: METHODOLOGY: ETHNOGRAPHY	46
SECTION 10: USE OF ETHNOGRAPHIC RESEARCH	53
SECTION 11: RESEARCH RESULTS AND CONCLUSIONS	56
SECTION 12: AN ACCOUNT OF HOW THE PROJECT/THESIS WAS MANAGED: A CRITICAL REFLECTION	62
SECTION 13: IMPLICATIONS AND PERSONAL LEARNINGS	63
ANNEXURES	
REFERENCES	

SECTION 1:

OVERVIEW

This overview explains my approach to this project and provides an insight into the salient features of the resultant thesis.

The objective of my project was to find the reasons why the Quality Improvement Process (QIP) which started enthusiastically in Old Mutual in 1987, has lost momentum. Its initial implementation was characterised by success, but later, certain shortcomings became evident.

In brief, the initial success of Crosby's QIP programme was attributable to its organised implementation throughout the organisation. It created a general awareness of key quality principles and gave a common understanding of a uniform language and standards throughout the organisation. However, after some years, senior management realised that this process was too simplistic, and that more was needed. A 'second phase' was implemented. This phase built onto the foundations laid by the QIP and focused on achieving client-orientated improvements in all business processes within the organisation. But this phase gradually lost momentum, as it failed to take into account the fact that lasting and continuous improvement in an organisation requires *fundamental changes* in almost every facet or part of the organisational whole. These fundamental changes include changes to the organisational structure, its management practices, its work processes and systems, changes in the way that managers view the organisation (that is, their mental models) and not merely a focus on *process* improvement within the organisation.

The hypothesis propounded in this thesis would attempt to prove or disprove a component of the aforementioned, namely that *a certain dominant mental model*, that is, a belief of how the organisation works, is needed amongst the management of an organisation to bring about genuine improvements. This hypothesis propounds that a high-performing organisation would exhibit a strong correlation between the mental model implied by quality improvement and the organisation's managers' dominant mental model of how their organisation works.

Having formulated the hypothesis, cues were provided as to the nature of the literature needed for research. This literature review therefore focused on quality, systems thinking (with specific reference to mental models) and ethnography. While the research methodology used did not support hypothesis-formulation, as an hypothesis is invariably based on assumptions and ethnography suggests that research should begin with minimal assumptions so as to maximise capacity for learning, literature indicated that it was a fair assumption to make.

The literature revealed that older philosophies on quality such as Crosby's four absolutes, 14 principles and the 'quality vaccine' and Deming's 14 points for management and the 'deadly diseases' that prevent management transformation, formed a basis for the contemporary philosophy of Total Quality Management (TQM).

TQM takes a more holistic approach to quality than did its earlier predecessors, by implying that the implementation of quality should effect change in each individual part of the organisation whole. This would then guarantee high performance and the resultant high-quality products and services that would meet the clients' needs and requirements.

Central to TQM is its revolutionary philosophy that radical and pervasive change is required for long-term and continuous improvement. It challenges conventional western management theory and practices. It is also based on a philosophy of systems thinking, which emphasises that the inter-dependencies between the various parts and aspects of an organisation are considered when tackling complex problems or when trying to effect improvement. When managers see this inter-relatedness and approach the solutions with the 'whole' in view, their ability to deal with complexity improves.

A practical systems thinking tool is the usage of various metaphors (Morgan, 1980) which create different images of the organisation, thereby facilitating the diagnosis of organisational hindrances and providing explanations for organisational behaviour. These metaphors inevitably reflect the mental models that managers have of their organisation.

Morgan's metaphors include that of a machine which implies that the organisation is viewed as reliable, predictable, routinised, requiring efficient performance with little deviation. Bureaucracy is the norm with downward control.

A second metaphor is that of an organism. Here the organisation is regarded as an open system and is best understood as ongoing processes rather than as a collection of parts. Survival is the primary focus, motivation and democracy are important and managers do most of the thinking on behalf of the organisation.

The third metaphor is that of viewing the organisation as a brain. It emphasises active learning rather than passive adaptability that characterises the previous metaphor. The organisation is able to self-organise and is characterised by high degrees of innovation and creativity.

The fourth metaphor is that of culture. This metaphor acknowledges that culture, that is shared values and beliefs, can be managed so as to make the organisation more effective. This metaphor focuses on the 'human' side of the organisation and it recognises the link between leadership style and corporate culture.

In conclusion of my literature review of Crosby, Deming and TQM it became clear that the mental model underpinning the Quality Improvement Process in Old Mutual related to metaphors three and four above. This being due to, amongst other manifestations, the systematic education of the process of quality improvement which provided a common language and standard throughout the organisation, as well as a sense of identity with the quality culture.

To substantiate my hypothesis, I carried out research on two managers: one represented a high performing organisation, or branch, and the other, a low performing branch. Ethnographic interviews were used to ascertain the dominant mental models of these two managers. The methodology used, called the Development Research Sequence (DRS), is based on a developmental sequence of specific tasks necessary to complete the research. This method was deemed the most effective, as the primary goal of the ethnographic approach is to describe a culture from the viewpoint of an 'inhabitant' of that culture. My main intention was to draw inferences from what these branch managers said in their interviews, and in so doing, I established the mental models that they had of their respective branches.

The research showed many similarities between the management styles of the two branch managers. After analysing the results of the research I came to the conclusion that both managers have the same mental model due to the fact that they have the same manager, belong to the same system, have the same formal job structures and reporting relationships. Both managers clearly had mental models aligned with metaphors of the machine and more so, the organism. This was evidenced in their maintenance of vertical and top-down hierarchical structures, their focus on the achievement of sales targets and expense management and the fact that the systems and processes within their branches were aimed primarily at achieving these objectives. There was no evidence of horizontal or team-based structures neither an emphasis on self-management (a brain metaphor characteristic), nor the articulation of a vision that would shape the attitudes and perceptions of their staff (a culture metaphor characteristic). There was also no evidence of the conscious provision of a quality service to their clients. The disparity between the levels of performance of their respective branches then, appears to have nothing to do with their mental models. This disproves my hypothesis.

While I have demonstrated that ethnography is a significant modern organisational research method, I have concluded that there were certain factors contributing to the somewhat limited results of my inexperienced use of the DRS method. Amongst these, the fact that only the branch managers were interviewed and that none of their staff were included in the research. This would have given a better description of the branch culture. Some experience is definitely required before administering this method effectively.

However, what remains is a useful insight into the initial problems described earlier, namely the loss of momentum of the Quality Improvement Process in Old Mutual Individual Life. The literature reviewed and the research conducted has led to valuable insights into solutions which would go a long way to get the QIP back on the road. Revolutionary and permeating change is needed to drive the second phase of quality implementation with senior management being effective change agents. Total Quality Management's philosophy needs to be embraced in its totality.

SECTION 2:

DESCRIPTION OF THE PROBLEM SITUATION

Old Mutual's quality improvement endeavour has had variable results. Since its inception it has been characterised by some success and more recently by certain shortcomings. But what has gone wrong and why?

Old Mutual introduced Philip Crosby's "Quality Improvement Process" in 1987. The programme introduced the fundamental concepts of quality to the organisation and the need for the company to bring about ongoing improvement in order to maintain a competitive edge in the industry. Organisation-wide communication, where the purpose of the programme was explained, was initiated by senior management as a way of showing commitment. Every employee was put through extensive training (mostly facilitated by line management) where quality improvement techniques and methods, certain key quality principles, and each employee's ongoing role in quality improvement was emphasised. Organisation structures were put into place in order to implement the programme's 14 steps.

In the subsequent years a number of successes were achieved in quality improvement, namely:

- Improved communication within head office, and between head office and the field operation;
- Adoption of a common language for discussing work processes;
- Increased general awareness concerning key quality principles such as conforming to client requirements, work processes and recognition;
- Several significant "corrective actions" were successfully implemented.

However, the organisation soon realised that Crosby's methodologies tended to be too simplistic. The methodologies neglected to focus on the changes required to the organisational structure, the redesign of processes that extend across a number of functional areas, and on the need to equip the organisation with new knowledge and skills that would ensure ongoing and continuous improvement. On their own, Crosby's methodologies were not sufficient for the needs for Old Mutual to adequately implement effective quality improvement. The organisation had, in effect, plateaued in terms of its quality learning and it was ready to embark upon a new level of learning.

A "Phase 2" in quality improvement was conceived in 1992. This phase did not supersede or replace the basic (Crosby) quality principles, but built on the foundations laid in "Phase 1". It was felt that from Phase 2 onwards, management's focus would be on achieving real and substantial client-oriented improvements in all business processes in the organisation.

Phase 2 would also pay attention to the way quality was "delivered" to the client. The concept of 'client care' would emphasise the importance of interacting with both internal and external clients and suppliers with courtesy, respect and with positiveness. Phase 2 was seen as an important next step towards transforming the organisation into 'world-class' which would position it to compete in an international sense. The notion of providing tangible "service products" that conform to the requirements of clients and the redesigning the business processes that lead up to the service products was central to Phase 2.

Approximately a year ago, an extensive internal climate and attitude survey was conducted in one of the four lines of business in Old Mutual, i.e. Individual Life (staff component of more than 5 000). Approximately 50 questions were asked with a view to surveying attitudes towards a number of characteristics or factors, for example: communication, relationships between managers and their staff, and recognition.

All levels of Individual Life staff were surveyed and some negative trends emerged. Over 30% of those surveyed disagreed or strongly disagreed (a 5 point response scale was used) with these statements:

- Old Mutual managers are part of a unified team with strong common values;
- Trust exists between managers and their staff;
- Good suggestions are rewarded;
- Praise and recognition is provided for good work;
- We make decisions without having to consult our seniors;
- A lot of effort has gone into quality improvement, and we now are seeing the benefits;
- My senior expects us to apply quality improvement but also applies it himself/herself.

In November 1993, I administered a technical training questionnaire within one of the divisions of Individual Life. The purpose of the questionnaire was to uncover technical training needs amongst staff members. One of the questions asked was whether people believed that there was a focus on quality rather than quantity (i.e. the achievement of high production targets) in their departments. Of the 117 respondents, as many as 77 indicated that the focus was on quantity.

The above mentioned information, my personal observation and my experience in Individual Life led me to conclude that Phase 2 of the quality improvement strategy in Individual Life had lost momentum.

Short term and immediate improvements occurred during Phase 1 as certain interventions were instituted, for instance, the organisation-wide training that was conducted and the committee-type structure that was established to implement the programme's 14 steps. However, long term and continuous improvements require significant changes in almost every facet of organisational life. Systemic and fundamental changes to the Individual Life organisation structure, its management practices, its work processes and systems and changes in the way its managers viewed the organisation (i.e. their mental models) were needed. Top or senior Individual Life managers had to become agents of change, redefining management roles and structure and accepting their own loss of power in the process. Phase 2 of the Individual Life quality improvement strategy did not live up to expectations because these changes were not affected and top management did not play this role. The hypothesis postulated in the next section attempts to prove or disprove one component of this line of argument, that is, that a certain dominant mental model (a belief of how the organisation works) is needed amongst the management of an organisation to bring about significant changes.

Although Old Mutual is a successful organisation (it enjoys the largest market share in the industry and a recent Life Office Association report showed that for the year ended 31 December 1993, the organisation increased its market share by 1.2% in terms of total premium income), it could be even more successful if it underwent the revolutionary change that is implied by Total Quality Management philosophy.

Given this background of Individual Life's quality improvement strategy and an outline and description of why it has stalled, the next step was to attempt to prove it.

SECTION 3:

FORMULATION OF THE HYPOTHESES

Using the problem situation described in the previous section as the point of departure, a hypotheses was formulated.

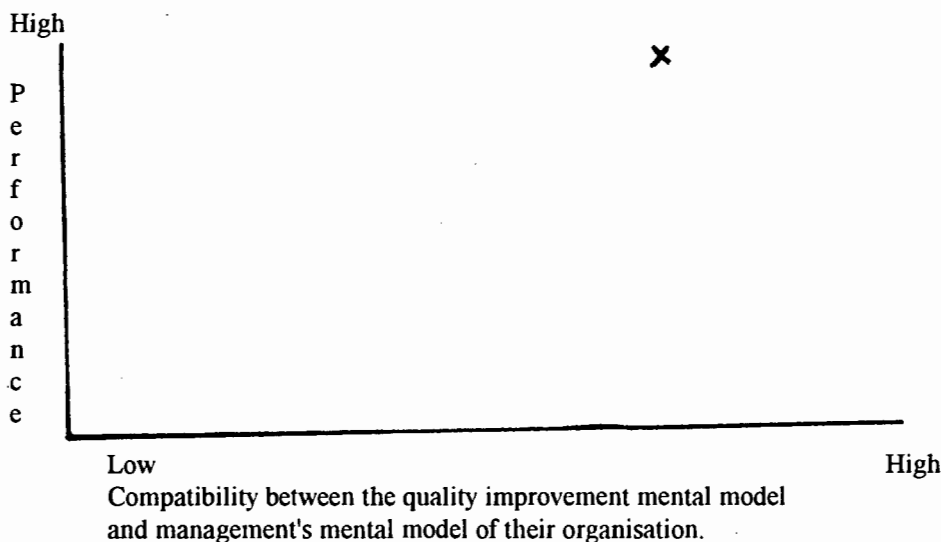
It was decided that the hypothesis would be researched within the field services or branch environment of Individual Life. The reason for choosing branches was because certain statistics could be obtained that would help assess performance. As we shall see, performance was considered an important variable in the hypotheses.

The following hypotheses which would delve into the realm of mental models was developed. Mental models are considered by many experts as playing a key role in bringing about organisational improvement. For instance, Argyris (1991) believes that everyone develops "a theory of action" - a set of rules that individuals use to design and implement their own behaviour, as well as to understand the behaviour of others. He goes on to say that these theories of action contribute mostly inadvertently to the organisation's problems, because people take them for granted. Theories of action are changed with difficulty, as people try to avoid embarrassment, threat and feelings of vulnerability or incompetence. Defensive reasoning encourages individuals to keep private the premises, inferences, and conclusions that shape that behaviour and avoids testing them in a truly independent, objective fashion.

Hypothesis:

A correlation exists between those organisations in Individual Life (i.e. branches) that are assessed as performing well and the compatibility between the dominant mental model underpinning the Individual Life's quality improvement process and those organisation's managers (i.e. branch managers) dominant mental model of how their organisations work.

This may be illustrated as follows:



The above illustration and the hypothesis say that a high performing branch would show high compatibility between the quality improvement mental model and management's mental model of their branch. The converse would also be true.

The assumption is made that high performance and the effective implementation of quality imply each other. This assumption is grounded on the information reviewed in the literature, which follows next.

The following method was followed in attempting to prove or disprove the hypotheses:

- Two branches were selected in the Western Cape region. One was a "high-performing" branch and the other was an "under-performing" branch. The branches were selected using the following indices: total issued policies per manmonth; commission content persistency; and controllable expenses, as a percentage of total retained commission content. These three measurements are widely accepted as indicators of branch performance. Definitions of the indices and details of each branch are provided in annexure 1.*
- Next, it was argued, by making reference to Crosby's and other's quality improvement philosophy and principles, that a dominant mental model underpins Individual Life's quality improvement process. Morgan's work on mental models (i.e. mechanism, organism, brain and culture) was reviewed.
- Ethnographic interviews (using Spradley's Ethnographic Developmental Research Sequence) were conducted with each branch manager. An attempt was made to identify the branch manager's dominant mental model of how their branches work.
- Finally, inferences, results and conclusions were drawn from the ethnographic research conducted and these were mapped back to the original hypotheses.

This hypothesis determined the nature of the literature that needed to be studied. The literature selected thus focused on Total Quality Management, Systems Thinking and Ethnographic research.

*The concept of multi-factor decision making was investigated as an alternative to using branch statistics. The Analytic Hierarchy Process (AHP), which uses pairwise comparisons and then computes weighting factors and evaluations, was specifically evaluated. Due to certain practical problems and some theoretical doubt of the technique's validity, it was not considered a viable option.

SECTION 4: LITERATURE REVIEW:

CROSBY'S QUALITY PHILOSOPHY AND PRINCIPLES

Philip Crosby's contribution to quality will be reviewed in this section. It is important to do so because Old Mutual adopted his philosophy and ideas when it began to implement quality in 1987. An analysis of Crosby's philosophy principles and methods is offered at the end of this section.

Crosby's quality experience was gained through working on a number of American missile projects and from 14 years' experience as a corporate vice-president, responsible for quality, within ITT. Currently he heads an institution called Crosby Associates that teaches his quality philosophy.

Crosby's (1984) definition of quality and his philosophy is underpinned by what he calls the four absolutes of quality which answer the following fundamental questions:

- What is quality?
- What system is needed to cause quality?
- What performance standard should be used?
- What measurement system is required?

The four absolutes are:

- Quality is defined as conformance to requirements, and not as goodness nor excellence.
- The system for causing quality is prevention, not appraisal.
- The performance standard must be Zero Defects, and not allowing an attitude of 'that's close enough' to prevail.
- The measurement of quality is the price of non-conformances, and not indices.

Each of the four absolutes will be briefly examined:

The Definition Of Quality Is: Conformance To Requirements

Crosby (1984, p.59) believes that quality improvement is all about getting everyone to do it right the first time and that the key to this is getting requirements clearly understood and then not putting obstacles in people's way:

"Management really has three basic tasks to perform:

- establishing the requirements that employees are to meet;
- supply the wherewithal that the employees need in order to meet those requirements and;
- spend all its time encouraging and helping the employees to meet those requirements".

A clear management policy to do it right the first time is required. Employees in an organisation will take requirements as seriously as their managers do. Crosby points out that problems come about because of vacillation in management's dedication to the policies and processes.

Crosby postulates the use of what is called a process model to help identify the requirements of suppliers (both internal and external) and of customers (both internal and external). In addition, it is a useful tool to describe processes. A process is any activity which takes an input and transforms it into an output. Figure 1 illustrates the basic characteristics of a typical process.

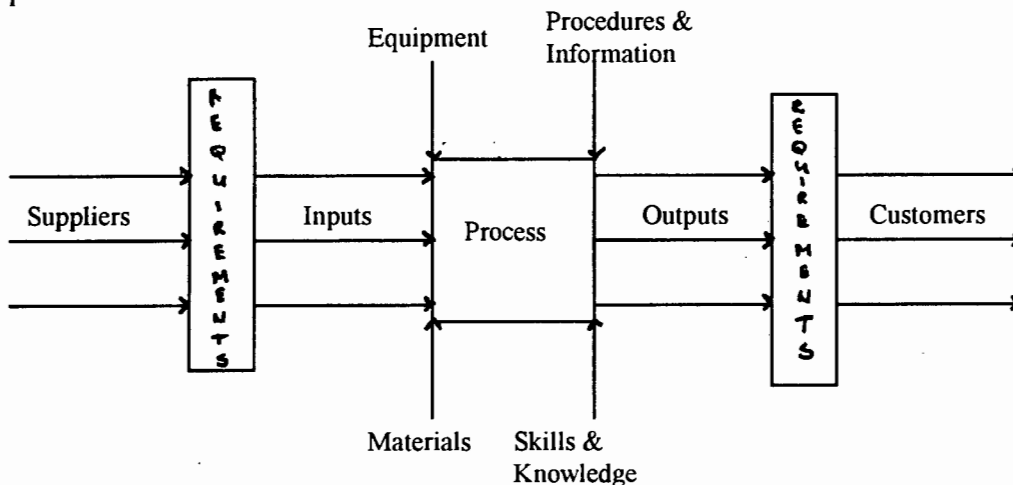


Figure 1: Process Model (Munro-Faure and Munro-Faure, p. 33, 1992)

A supplier is anyone who supplies the input and a customer is anyone who receives the output from a process. All activities within a business are made up from a series of often complex supplier/customer chains.

The System Of Quality Prevention

Whereas conventional quality practice will focus on appraisal, Crosby urges that preventative planning, thinking and implementation become the order of the day. Appraisal, which is also called checking, inspection or testing is always done after the fact and the result is to merely sort the good from the bad. Crosby (1984, p67) points out that:

"Appraisal is an expensive and unreliable way of quality. Checking and sorting and evaluating only sift what is done. What has to happen is prevention. The error that does not exist cannot be missed".

The concept of prevention is based on having an in-depth understanding of the process that needs the preventative action. Only then can one begin looking for what Crosby calls "opportunities for error".

Crosby (1984) also discusses the use of Statistical Quality Control (SQC) as a technique that helps prevention. SQC identifies and then measures each variable in a process. When a variable begins to move out of control, it is adjusted back in. If all variables are inside their lines, then the end result should be just what was planned.

The Performance Standard Is: Zero Defects

Crosby (1984, p74) points out that although setting requirements is a process that is readily understood, "the need for meeting those requirements each and every time is not so readily understood". His explanation of zero defects is that it is not an exhortation to the workforce to do better (zero defects was picked up by many organisations as a motivation programme), but it is a management performance target. It is not meant to imply that errors will never happen, but that they should not be expected to happen. When errors do occur, they should not be accepted as inevitable. Prevention activities should be introduced to ensure errors do not occur.

Zero defects is of particular importance when one considers the interdependence of individuals, departments and functional divisions within organisations and the interdependence between the organisation and its suppliers. People have to know that they can depend on each other. What one department sends another should be as promised. When this happens, then people can become realistic about the requirements they impose on each other.

The Measurement Of Quality Is: The Price Of Non-Conformance

The measurement of defects has been a fairly common occurrence on the manufacturing line. However, Crosby (1984, p85) states that it has not been used as a management tool because it has not been presented to management in terms it can understand ... "the best measurement for this subject is the same as for any other - money".

Cost of quality is divided into two areas; the price of non-conformance and the price of conformance. The price of non-conformance are all the expenses involved in doing things wrong. For example, the cost of rework or expediting. Crosby believes that the price of non-conformance represents 20 percent or more of sales in manufacturing companies and 35 percent of operating costs in service companies. Price of conformance is what is necessary to spend to make things come out right. This includes most of the quality functions, all prevention effort and quality education.

Crosby believes that management is the cause of most of the quality problems in an organisation. To eliminate the non-conformance which exist, he recommends administering a 'quality vaccine'.

The Quality Vaccine

The vaccine (against non-conformance) requires a strategy that contains three distinct management actions:

Determination: this occurs when the members of management recognise that their action is the only way that will take the organisation out of the mess.

Crosby stipulates that companies don't do well with quality because they are just not determined enough. The companies that do not get much improvement, even though they appear to be determined, have common characteristics:

- The effort is called a programme rather than a process. A programme has an end, whereas a process is never finished and requires constant attention.
- All effort is aimed at the lower level of the organisation.
- The quality control people are cynical about concepts like getting people to do it right the first time.
- Training material is created by the training function who do not have the right experience to teach quality concepts.
- Management is impatient for results which leads to short term decisions and actions.

Crosby (1984, p.57) also points out that credibility of the commitment to quality and dedication are closely intertwined;

"Management has to continually show it is in it for the long haul - forever. It is not enough to say the right-sounding words; everyone does that. The actions and the lifestyles have to be visible".

Education: is the process of helping all employees have a common frame of reference, a common language of quality and an understanding of their individual roles in the quality improvement process. The overall educational aspect requires executive education, wherein senior management can learn its role; management education, wherein those who must implement the process learn how to do it and an employee education system, wherein all the employees of the company learn how to comprehend their roles.

Implementation: involves the installation of the quality improvement process. It requires that actions be taken to actually change the culture and management style of the company. Crosby stresses that changing a culture is not a matter of teaching people a bunch of new techniques or replacing their behaviour patterns with new ones. It is a matter of exchanging values and providing role models. This is done by changing attitudes.*

Implementation is made up of fourteen things that must be followed in a certain order so that a quality culture may be inculcated.

The Fourteen Steps to Quality Improvement

1. **Management commitment:** a corporate policy on quality needs to be issued, quality should be made the first item on the agenda of the regular management status meetings and senior management must example and talk quality at every conceivable opportunity.
2. **The quality improvement teams:** have as their purpose to guide the process and help it along. The teams should represent all functions of the operation and one of their most important tasks initially is to set up and to schedule the education programme.
3. **Measurement:** of processes must occur as a means of understanding non-conformances to customers (both internal and external) requirements. As all work is a process, measurements focusing on inputs to and output from processes are possible.
4. **The cost of quality:** as mentioned earlier, the cost of quality analysis throughout the organisation occurs in terms of the price of conformance and the price of non-conformance. Cost of quality analysis is a means of identifying priority areas for corrective action.
5. **Quality awareness:** people need to know about the management commitment, about the organisation's quality policy and about the costs of doing things wrong. The spreading of information, Crosby recommends, should occur through management's actions and through the organisation's existing communication system.
6. **Corrective action:** the purpose to identify problems using data that show what the problems are and analyses that show the causes of the problems. Once the root cause has been determined, it can be eliminated forever.

*This view is of particular note as it supports my argument (detailed later) that the dominant mental model required for successful quality implementation and high-performance, is the "culture" mental model (Morgan).

7. **Zero defects planning:** should be taken very seriously and planned in a dignified way, with no hype about it. Zero Defects day provides an organisation with an opportunity to recommit itself to quality, to celebrate certain quality achievements and to communicate.
8. **Employee education:** focuses on developing knowledge about the four absolutes and on developing skills to help supervisors and employees achieve them.
9. **Zero defects day:** is a day that enables management to really show that it is serious about quality improvement.
10. **Goal setting:** is closely aligned with the measurement step. When measuring and charting non-conformances, the ultimate goal is zero defects. However, in the interim, intermediate goals should be set and communicated.
11. **Error-cause removal:** is asking people to state the problems they have so that something can be done about them. This step is closely aligned to corrective action.
12. **Recognition:** managers and supervisors are empowered to recognise their good performers in a formal and informal manner. Quality award ceremonies are an integral part of the intervention.
13. **Quality councils:** allow employees an opportunity to get together to learn from each other and to discuss the progress they are making in their implementation efforts. Quality councils serve as an excellent means of gauging how people are feeling about quality improvement.
14. **Do it all over again:** participation in implementation will result in much learning and comprehension. This needs to be ploughed back into the quality improvement process in finding ways for continuing improvement.

The Tennant Company Story (Example)

An organisation in the USA, the Tennant Company which produces floor sweepers, scrubbers, scarifiers and floor coatings, implemented Crosby's Quality Process in 1979. In subsequent years, the organisation learned a great deal from its experience and in 1987 its President and Chief Executive Officer, Roger Hall, and two of his colleagues wrote a book describing their journey. This is what they had to say about their effort:

"If anyone had told us seven years ago that we would write a book we would have laughed out loud. We consider ourselves students, not teachers. When we started down the never-ending road to quality, we had no idea how many opportunities would grow from what we were doing. A good example is this book. We decided to write it because of the many requests we've had from other companies for information and sound practical advice. (Hale, Hoelscher and Kowel, 1987, p129)".

The first part of the book outlines how the Tennant Company practically applied Crosby's absolutes and the 14 implementation steps. Hale et. al. (1987) points out that Crosby was not their only teacher. They adopted statistical quality concepts learned in seminars with other productivity and quality experts, including W. Edwards Deming and Joseph Juran. They continue to say, however, that they were drawn to Crosby's overall approach because it could be applied in all segments of their company, from manufacturing to office and field operations. "Most important, we chose Crosby's approach because it is quality management more than quality control. We were convinced that management was the key to improved productivity and quality". (Hale, et al. 1987, p21).

Five critical factors were identified in achieving lasting improvement in quality.

1. **Management commitment:** Hale, et al. define management commitment as full participation in terms of time, budget and personal involvement. They found that one way of achieving genuine and uncompromising commitment was to have each of their executives formulate at least one quality-related goal, which was weighted against the compensation that the individual received. With compensation riding on achievement of that goal, there was a personal reason to become involved. The organisation also found that chances for success were increased if there was at least one champion for quality among top management. The champion was willing to take risks, cut through red tape and commit money to quality improvement projects.
2. **Employee involvement:** The Tennant company approached employee involvement by setting both long and short range goals for bringing employees into the process. In the first two years they involved about 30 percent of the people. They succeeded in bringing in the next 30 percent in the following two years and so incrementally, they managed to involve almost all of their employees.
3. **Co-operative, non-adversarial worker/manager relationships:** Hale, et. al. (1987) believe that co-operation occurs when everyone is working toward a common goal. They came across many barriers to achieving this end; barriers caused by distrust between management and workers (for example, they did not really trust management's motives in establishing zero defects programmes) and barriers caused by blame (for example, sales people blamed shipping when machines were delivered damaged or late, shipping blamed order processing and order processing blamed manufacturing, and so on). The organisation responded by insisting that managers and supervisors increased the amount of time they spent among employees. They began to ask questions, they listened and made themselves more available:

"Supervisors moved their desks out from behind glass doors onto the manufacturing floor. The doors of the managers' offices were opened. Companywide, we made an effort to eliminate the red tape that hindered communication and co-operation". (Hale, et al. 1987, p72)."

4. **Something in it for the people:** The three things that the Tennant company focused on in order to provide its staff with some incentive to participate were; recognition, reward and job satisfaction. Of particular interest was a suggestion programme called S.W.A.T. (Stop Waste at Tennant) that they instituted, in which employees who recommended change were awarded 20 percent of the organisation's first-year savings directly related to the recommendations. This apparently built much enthusiasm for individual and group contributions to the quality process.
5. **Time, energy and determination:** Taking a long term view is required when attempting to permanently change an organisation's culture. This is the stance that was taken by Tennant. They realised that the quality effort had to become so integral to everyday operations and to the thinking of employees at all levels that it became institutionalised in everything they did and this needed lots of patience, energy and determination.

This example serves as a case study of Crosby's method. Of note is the point that the Tennant Company supplement Crosby's approach with other experts in the field. This was one of the learnings during Individual Life's implementation of phase 1. The organisation recognised the need for a complementary approach to the problems it faced, and thus the advent of Phase 2.

Strengths And Weaknesses (Flood)

Flood (1993) has reviewed Crosby's philosophy and is of the opinion that any major contribution to a field like quality, has its strengths and weaknesses. He believes that a critical analysis in terms of strengths and weaknesses will help to build a strong quality discipline and improve upon the effort made so far.

Flood (1993) identifies the main strengths of Crosby's work as being:

- His clearer approach as compared to the approaches of other quality gurus such as Deming and Juran, and the fact that Crosby's work is supported by a number of tools that are easily understood.
- Crosby's creative usage of metaphors like 'vaccine' and his personal ability as a motivator for getting quality processes established in organisations.
- That the notion of worker participation is emphasised.

In my view, the main strength of Crosby's method lies in the structure it imposes on an organisation which ensures focus on important aspects of the method. Quality Improvement Teams, chaired by general managers, have subcommittees reporting to them. A subcommittee exists for each of Crosby's fourteen steps.

Flood (1993) highlights the main weaknesses as:

- The philosophy that implies that workers are to blame for quality problems, which in turn understates the essential role and contribution that management should be making in the quality effort.
- The heavily marketed and promoted ideas and concepts that raise insufficient awareness of the obstacles that invariably will be encountered when implementing the process.
- Zero defects that is misunderstood to mean avoidance of risk, which negatively impacts on creativity.
- The philosophy which assumes that people will be prepared to work in an open and conciliatory manner. Whenever this assumption is unfounded in an organisation, Crosby's process becomes less effective.

I disagree with the first and third weaknesses outlined above by Flood. Crosby at no time implies that workers are to blame for quality problems. In fact Crosby (1984, p.100) believes that "... senior management is the key to the solution, as well as the cause of the problem". With regards to zero defects, Crosby tries to challenge the conventional wisdom that says that error in work is inevitable. He positions zero defects as a performance standard that must be aspired to. He acknowledges that errors may some times occur, but that they should not be accepted as inevitable and that preventative solutions be sought.

I believe the main weaknesses in Crosby's method is its lack of attention to certain organisational aspects, such as the changes needed to the organisation structure and human resources systems and practices, that must be addressed in order to achieve long term and continuous improvement.

SECTION 5: LITERATURE REVIEW:

DEMING'S QUALITY PHILOSOPHY AND PRINCIPLES

In this section, Deming's work will be considered. Some historical background with regards to quality is needed if an understanding of how quality has evolved is to be obtained. Crosby and Deming (and there are others too, i.e. Joseph Juran, Shigeo Shingo, Genichi Taguchi and so on) provide such a background. Contemporary schools of thought on quality will be investigated in section 6.

Dr W. Edwards Deming is perhaps the most widely known of all the quality gurus. After graduating as a doctor of physics, he spent his early years as a US government employee. He spent most of this time with the Department of Agriculture and the Bureau of Census, where he specialised in statistical techniques.

He is best known for his work in Japan, which commenced in 1950 and created a revolution in quality and economic production. In the early days, Deming focused on statistical quality control methods. In later years he developed the concept of quality as a management activity. He has been recognised by the Japanese as making an outstanding contribution to quality in Japan. In 1960 he was awarded Japan's highest Imperial honour, the Second Order of the Treasure. Even today, Dr Deming's contribution is recognised in the annual awards made for outstanding application of statistical quality control throughout industry, the Deming Prizes.

Deming's major philosophy is that quality improvement is achieved through the statistical control of all processes (not just those involved with the product) and the reduction in variability of these processes. He identified 'special' and 'common' causes in variability. Common causes affect all operators and machines and are usually correctable only at a higher level of management. Special causes are causes that can be assigned to something or somebody. Statistics and in particular Statistical Process Control (SPC) charts were the main technique used to identify root causes and to diagnose problems. In Deming's (1966, p.90) own words :

"Statistical techniques, based as they are on the theory of probability, enable us to govern the risk of being wrong in the interpretation of a test. Statistical techniques defend us, almost unerringly, against the costly and demoralising practice of blaming variability and rejections on to the wrong person or machine. At the same time, they detect almost unerringly the existence of a special cause when it is worth searching for".

Dr Deming believes that the basic cause of sickness in American industry is failure of top management to manage. He propagates a transformation of the style of American management, which will require a whole new structure, from foundation upward. Long term commitment to new learning of a new philosophy is required of any management that seeks transformation. Deming states that the first step in transformation is to learn how to change: that is, to understand and use of the 14 Points for Management.

The 14 Points for Management

1. Create constancy of purpose for improvement of product and service

Deming (1986) points out that two problems exist : problems of today and problems of tomorrow. Problems of today encompass, for example, maintenance of quality of product put out today, budget, profits, sales and forecasting. He says that it is easy to become immersed in the problems of today, becoming ever more and more efficient in them. Problems of the future need constancy of purpose and a long term dedication to improvement of competitive position to keep the company alive through:

- The allocation of resources for long term planning and innovation.
- Putting resources into research and education.
- Constantly improving the design of the organisation's products and services.

2. Adopt the new philosophy

Deming (1986) stipulates that business can no longer afford to tolerate commonly accepted levels of mistakes. Management must accept responsibility and lead the change process.

3. Cease dependence on mass inspection

100% inspection to improve quality, Deming (1986) says, is equivalent to planning for defects. It acknowledges that the process does not have the capability required for the specifications. Quality comes not from inspection but from improvement of the production process. Deming (1986) believes that there are exceptions, when inspection at the right point for minimum total cost is important. He uses an example to illustrate this point of the manufacture of complicated integrated circuits, where the separation of good ones from bad ones is necessary.

4. End the practice of awarding business on the basis of price alone

"The policy of forever trying to drive down the price of anything purchased, with no regard to quality and service, can drive good vendors and good service out of business". (Deming, 1986, p32). A long term relationship between purchaser and supplier is recommended. Only when a supplier can look forward to long term business (based on loyalty and trust) with a purchaser, can he be innovative and develop economy in his production processes.

5. Improve constantly and forever the system of production and service

A theme that is regularly postulated by Deming (1986) is that quality must be built in at the design stage. Teamwork in design is paramount. Continuous improvements must be made in:

- Understanding of customer's needs
- The education, knowledge, learning and skill of all employees
- The selection of new employees, their placement and their training
- The studying of records to learn more about the effects of changes in temperature, pressure, speed and change of material.

6. Institute training

This point, which refers to the foundations of training for management and for new employees, differs from point 13 which refers to continual education and improvement of everyone on the job, i.e. self-improvement. Deming (1986) points out that Japanese management has by nature important advantages over management in America. The Japanese start their career with a 4 to 12 year internship on the factory floor, resulting in an intimate knowledge of the problems of production, of procurement, of accounting and of sales.

In addition, a problem in training and leadership arises from a flexible standard of what is acceptable work and what is not. The standard is dependent on the production pressures, in terms of numbers or quotas, that supervisors are faced with.

7. Adopt and institute leadership

The required transformation of Western style of management, requires that managers be leaders. A focus on results or outcome (appraisal of performance, meet specifications and standards, management by numbers and Management By Objectives), should be substituted by leadership. Leaders should :

- Remove barriers that prevent workers from achieving pride of workmanship (linked to point 12);
- Know the work that they supervise. They must be empowered and directed to inform their seniors of aspects needing corrective action;
- Differentiate between special and common causes and take the appropriate corrective action.

8. Drive out fear

Some characteristics of fear are:

- The loss from impaired performance and padded figures.
- Resistance of knowledge. People fear that new knowledge brought into the company might disclose their failings.

- The inability to serve the best interests of the company through the necessity to satisfy specified rule or quotas of production.

9. Break down barriers between staff areas

Teamwork between all divisions in an organisation is sorely needed. "Teamwork requires one to compensate with his strength someone else's weakness, for everyone to sharpen each other's wits with questions. Unfortunately, the annual rating defeats teamwork. Teamwork is a risky business. He that works to help other people may not have as much production to show for the annual rating as would if he worked alone". (Deming, 1986, p64).

10. Eliminate slogans, exhortations, and targets for the workforce

Posters ("Your work is your self-portrait!"), slogans ("Do it right the first time!") and exhortations ("Getting better together!") are directed at the wrong people. They arise from the assumption that production workers could, by merely being more careful and by working harder, improve quality and reach zero defects. These posters do not take account of the fact that most problems come from the system. (Deming estimates as much as 94% of the trouble can be assigned to 'common causes'). Because management is asking workers to do what they are unable to do, the effect is fear and mistrust.

11. Eliminate numerical quotas for the workforce and for people in management

The elimination of work standards or numerical quotas are recommended. Work standards only succeed in telling employees that quantities or volumes are important, irrespective of the errors made. Work standards seldom make reference to the quality of workmanship or innovation or finding better ways. Deming (1986) says that the job of management is to replace work standards by knowledgeable and intelligent leadership.

12. Remove barriers that rob people of pride of workmanship

These barriers must be removed from two groups of people. One group is hourly workers who are mostly treated merely as a commodity by management. The other group is management or people on a salary. Deming (1986) believes that the biggest barrier is the annual rating of performance; because the focus is on the end product and not on helping people through leadership. The consequence is short term thinking and short time performance. Superiors are forced into using numerics in evaluations because counting is easier for them. Teamwork is also sacrificed for individualism.

13. Encourage education and self-improvement for everyone

New education and new learning is required by Western managers if its industry is to be reconstructed. The widespread fear of knowledge must be overcome if advances in competitive position are to occur.

14. Take action to accomplish the transformation

To help achieve the aforementioned 14 points, Deming (1986) proposed an action plan for management, comprising seven steps :

- 14.1 Management must understand and accept the 14 points, the new philosophy and the undesirability of the Deadly Diseases, which will be explained later. They must then formulate the action plan for change.
- 14.2 Management takes pride in having taken this decision and develops courage to follow the new direction, even if there is resistance among their peers.
- 14.3 Management explains to everyone in the company (by way of seminars of other means) why change is necessary. Enough people in the organisation must understand the 15 points and the Deadly Diseases.
- 14.4 Every job is considered a process, which is made up of stages. A process is characterised by inputs that are transformed into output. The customers and suppliers (both internal and external) are identified. Continual improvement of processes aimed at better satisfaction of the customer is sought.
- 14.5 An organisation should be put together that will guide continual quality improvement. Deming advocates the Plan, Do, Check, Action cycle when introducing any improvement.
- 14.6 Every employee needs to participate as a team in improving processes. A team may well be composed from different staff areas and it has a customer.
- 14.7 An organisation for quality is required. This requires the participation of knowledgeable statisticians to guide process improvement.

Deming (1986) believes that certain “deadly diseases” stand in the way of transformation of Western style of management.

The Deadly Diseases

- A lack of constancy of purpose to plan product and service.
- Emphasis on short term profits and thinking (the opposite of constancy of purpose).
- Evaluation of performance, merit ratings, or annual review are unsatisfactory as they encourage short term performance and create despondent employees.
- Management is too mobile which creates a need for quick results and it annihilates teamwork. It is usually the individual that has failed to receive a promotion or a good annual rating that will look around for better opportunities elsewhere.
- Management occurs only by the use of visible figures with no consideration for unknown figures; for example, the multiplying effect on sales that comes from a happy customer and the opposite effect from an unhappy customer.

Strengths and Weaknesses

As with Crosby, Flood (1993) assesses Deming's contribution in terms of its strengths and weaknesses.

The main strengths are seen as :

- A systematic frame of reference and logic that provides an insightful way of understanding and reasoning about organisation.
- The prioritisation that management comes before technology.
- The notion of leadership is regularly referenced and it is seen as one of the aspects that must be urgently addressed, if Western management is to be transformed.
- The dignity of employees and their right to have pride in their work is continually emphasised.
- Statistical and quantitative methods, which have widespread application, are an integral part of Deming's work.
- Japan and the 'Western world' are seen as similar and dissimilar in many ways, and Deming's philosophy is appropriately adapted.

Flood (1993) highlights the main weaknesses as :

- The seven step action plan and principles which are too vague to be readily put into practice.
- The lack of detail in the work on leadership and motivation.
- Little guidance is given when interventions are needed in political and coercive situations. However, Deming does explicitly recognise this difficult area in his philosophy.

SECTION 6: LITERATURE REVIEW:

TOTAL QUALITY MANAGEMENT

The sections on Crosby and Deming provide the framework for this section. What has been learned from these and other quality gurus, and what has been learned by more contemporary writers and researchers on the subject can be synthesised within a whole system or a holistic framework labelled Total Quality Management (TQM).

In this section, TQM will be examined by determining what is meant by the concept and by outlining its philosophy and principles. Next, TQM's challenge to traditional management theory will be discussed and finally, its revolutionary nature will be considered.

What is meant by TQM?

The concept TQM is best understood by examining each of the letters in the acronym. According to Flood (1993), the word 'total' implies a holistic approach to how matters are viewed in organisations. The word also stresses that everyone in the organisation must become completely involved in the endeavour. Teamwork will be the key to successful implementation. The word 'quality' (in TQM) is defined as total conformance to requirement; these requirements are the total customer requirement, not just a product or service specification (Munro-Faure and Munro-Faure, 1992). Lastly, the word 'management' refers to the need for everyone to take full responsibility for the managing of their jobs. It does not refer to the company's managers, in the traditional sense.

Now that the concept TQM has been analysed, it is necessary to consider the philosophy and the main principles that underpin it.

TQM philosophy and principles

Flood (1992) is of the opinion that TQM rests upon the contemporary premise of systems thinking:

"Systems thinking proposes a whole or total approach to quality management. The word total is very important in this expression because it states that we seek comprehensive ways of dealing with complex issues - involving everyone and addressing all major issues".
(Flood, 1992, p.29)

Gharajedagi (1992) concurs with this notion. He believes that one of the main reasons why corporate America is losing its competitive edge is because it fails to operationalise new knowledge that it still generates at a rate faster than the rest of the world combined. In searching for an answer he has singled out TQM as the panacea; the vehicle for regaining its competitive position. Gharajedagi (1992) points out that despite corporate America's fascination with TQM, it has not yet come to terms with the obstructions that are frustrating its effectiveness.

According to Gharajedagi (1992, p6) a huge obstacle is:

"The challenge of managing interactions between increasingly independent members of a highly interdependent social system. Dissolving this dilemma requires a systems approach, which would supplement the TQM tradition".

The consequence of the increasing independence amid a highly interdependent system is energy lost in internal conflict. Excessive conflict frustrates the ability of the organisational structure to change.

Gharajedagi here, is talking about systems thinking. A greater understanding of systems thinking is needed in order to fully comprehend its association with TQM. Systems thinking will be explored in more detail in the next section.

Flood (1992) offers 10 principles drawn out from the TQM philosophy:

- There must be agreed and negotiated requirements, for both internal and external customers and suppliers.
- All requirements must be met first time, every time.
- Ongoing quality improvement will reduce waste and total costs.
- Preventative thinking, planning and implementation is required, rather than a reactive and fire-fighting approach.
- Quality improvement can only result from planned management action.
- Every job must add value.
- Full involvement and participation, across all functions and all levels is paramount.
- There must be an emphasis on measurement to help comprehend the challenges faced and to meet objectives and requirements.
- A culture of continuous improvement must be established, which includes significant leaps forward as well as steady improvement.
- Creativity and innovation should be promoted.

In short, there are two distinct but interlinked processes at work in TQM, namely to improve the quality of the goods, services and the business processes in organisations, by focusing on client and supplier requirements and to develop the view, that all employees have an individual responsibility for quality which can be achieved through participation. Everyone must feel that they have a share in the "quality problem".

The above-mentioned philosophy and principles should be seen against a background of how TQM has moved away from traditional or conventional management theory and practice.

TQM challenges traditional management theory and practice

For TQM to really succeed in bringing about long-term product and service quality, organisations must bring about fundamental changes in their management practices and philosophies. Grant, Shani and Krishnan (1994) argue that TQM is a new management paradigm which is forcing a rethink of management concepts and practices. Their research has shown that TQM inevitably conflicts with established Western management practices. Its assumptions and theories are quite different from those underlying conventional practices, and therefore TQM will not succeed in a firm unless conventional practices are transformed.

If TQM is a new paradigm, Grant et.al. (1994, p.26) call the paradigm of conventional management the "economic model of the firm", which is based on the principles of maximising shareholder value. The differences between TQM and conventional management practices are shown in the following table:

	TQM	Economic Model Of The Firm
Organisational Goals	Servicing customer needs by supplying goods and services of the highest possible quality.	Maximising profit (i.e. of shareholder wealth)
Individual Goals	Individuals motivated by economic, social, and psychological goals relating to personal fulfilment and social acceptance (i.e. individuals are motivated by more than economic gains).	Individuals motivated only by economic goals: maximisation of income and minimisation of effort.
Time Orientation	Dynamic: innovation and continual improvement.	Static optimisation: maximising the present value of net cash flow by maximising revenue and minimising cost.
Co-ordination and Control	Employees are trustworthy and are experts in their jobs - hence emphasis on self-management. Employees are capable of co-ordinating on a voluntary basis.	Managers have the expertise to co-ordinate and direct subordinates. Agency problems necessitate monitoring of subordinates and applying incentives to align them with objectives.
Organisational Design	Inverted hierarchical structures, team based structures, "cluster organisation" are common. Emphasis as horizontal structure and co-ordination of activities.	Incentives and sanctions devised that align employee behaviour with organisations goals as employees are pursuing self-interested goals.
Role of Information	Open and timely information flows are critical to self-management, horizontal co-ordination, and quest for continual improvement.	Information system matches hierarchical structure: key functions are to support managers' decision making and monitor subordinates.
Principles of Work Design	System-based optimisation with emphasis on dynamic performance.	Productivity maximisation by specialising on the basis of comparative advantage.
Firm Boundaries	Issues of supplier-customer relations, information flow, and dynamic co-ordination common to transactions within and between firms.	Clear distinction between markets and firms as governance mechanisms. Firm boundaries determined by transaction costs.

Table 1	Emerging management paradigms: TQM and the economic model of the firm. (Grant, Shani and Krishnan, 1994, p.23)
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Table 1 shows that TQM emphasises the firm's primary objective of providing customer satisfaction. Grant et al. (1994) point out that TQM does not reject the notion that a primary objective of the firm should be the pursuit of profit maximisation, but it views long run profitability as an outcome of serving customers rather than as a driving force. According to the economic model, each employee is pursuing self interested goals. TQM recognises that individuals are motivated by more than economic gains. TQM recognises the human need to create. It reasserts the notion that products and services embody the effort, creativity, values and collective personality of their producers. TQM emphasises horizontal organisation structure and co-ordination of activities rather than vertical structure. Moreover, it points to a departure from the specialisation-based approach of grouping similar activities along functional lines.

Within the economic model, the manager's primary role is to prevent and detect shirking by employees. Therefore managerial access to information is critical to control. Under TQM, information is also essential to decision-making, control, and performance, but the information flow is different. It is assumed that employees are motivated to pursue organisational goals and can make decisions about their own work, and that information and feedback is necessary to optimise their behaviour and interactions.

Flood (1993) supports Grant's et.al. view when he points out that early scientific management (Taylor) and bureaucracy theory (Weber) still dominate current management practices, resulting in the principles of TQM being interpreted using the traditional mechanical-coercive vision of organisations. This interpretation does not allow for the main TQM principles to be optimally applied to the full advantage of an organisation and its staff. A possible explanation for why management today still embraces these traditional theories is offered by Weisbord (1987) who provides a fresh interpretation of Douglas McGregor's famous dichotomy between Theory X and Theory Y. McGregor classified these opposing voices as theories of human nature, one (X) ground in assumption of laziness and incompetence, the other (Y) in assumptions of self-motivation, achievement and growth. Weisbord (1987) believes that Theories X and Y do not describe people with opposing management styles, but an inner X/Y dialogue within each of us. This X/Y dialogue energises our darker as well as our more enlightened selves and this possibly represents the main dilemma in building more productive workplaces. The implications for TQM are clear: managers must recognise that they have a darker self which must be contained and tempered by their enlightened selves. Failure to do this will prevent a move away from the traditional mechanical-coercive vision of organisations.

Socio-cultural systems thinking and viable systems thinking is what Flood (1993) says TQM principles should be interpreted through. Stafford Beer's (1973) [who is cited by Flood, 1993] viable systems thinking is an approach to organising five main management functions as a viable system-in-focus. The concept of recursion (a special form of hierarchy) is also used to explain that a viable system-in-focus is a systemic part of a less focused viable system and contains in itself viable systems. Socio-cultural systems thinking can be used to manage an organisation assuming that people interpret their action according to a negotiated and shared set of social rules and practices. These then, constitute cultures that control people and lead overall to cohesive and orderly behaviour. This train of thought will be picked up on a bit later when a discussion occurs on how organisational cultures (one of Morgan's metaphors)

may be engineered to align the people to the goals of the organisation. Both socio-cultural and viable systems thinking allow for a humanistic element as a dominant theme and strongly imply a need for each other in quality management. In fact, Flood (1993, p126) points out "that securing advantages of quality management can only happen when people have autonomy, responsibility, can participate and are not subject to coercive forces, i.e. when they are free".

The importance of the human dimension in TQM is also recognised by others. For example, Scherkenbach (1991, p221) in his book : Deming's Road to Continual Improvement, points out :

"People are our most important resource. This is easy to say, but hard to understand, and even harder to operationalise. The difficulty arises because people are different from each other, and from all other resources. The methods that produce prosperity in the mechanical world may cause base subsistence in the living world. My guiding principle, as I work with people, is the belief that they first need to feel important as individuals, and then they also need to feel like an important part of a family, or society, or team. The balance between these needs is vital".

Yet another perceptive is provided by Kiefer and Senge (1984) who write about 'metanoic organisations' that are characterised by an underlying principle that individuals aligned around an appropriate vision can have extraordinary influence in organisations.

Metanoic organisations assume that :

- People are basically honest and trustworthy, and that each wants to contribute to the organisation.
- People are purposeful.
- Each individual has a unique contribution to make.

In summary, the valid and correct use of TQM cannot occur without the appropriate consideration of the human dimension. Flood (1993) calls this a need for human freedom. Flood (1993) reasons that three dimensions to human freedom are central to the theory of TQM. These are :

Designing freedom:

Beer's (1973) Viable Systems Model (VSM) is cited by Flood (1993) as a powerful means to designing freedom. The VSM is concerned with the science of organisation, or cybernetics. It assumes that when organisations do not perform well, cybernetic principles are being violated. The concept of cybernetics is considered relevant to man's endeavour to become more efficient.

According to Clemson (1984), cybernetics is concerned with systems in which :

- Organised complexity is important.
- Circular causality is important in contrast to linear chains of causality.
- Holistic properties are exhibited.

Clemson (1984) contends that three laws are representative of cybernetics :

- Self organising system: complex systems organise themselves.
- Feedback: the output of a complex system is dominated by the feedback and, within wide limits, the input is irrelevant.
- Requisite variety: given a system and some regulator of that system, the amount of regulations attainable is absolutely limited by the variety of the regulator.

Beer argues that as the world has evolved over time and become more complex, laws of effective organisation and variety reduction have been disobeyed. Old variety reducing methods involved tight structures, with organisations broken down into small chunks, which were all controlled from a single centralised source. Rigid rules existed in abundance. As complexity and variety increased over time, the organisation was broken into smaller and smaller chunks, with more rules to govern matters. People became mindless parts in a machine-like structure, creativity was suppressed and very little scope existed to make decisions.

According to Beer's organisational cybernetics and VSM, various components of an organisation should cope with variety relevant to them. There are five main management functions set out in recursive form to do this. Effective organisation is also seen as important. VSM is created by democratic consultation, where people only need to give up as much freedom as is necessary to maintain viability of the whole.

Freedom through debate:

Debate leads to freedom of the mind, which involves making escapes from trap-like preconceptions. Vickers (1970) as cited by Flood (1993) uses a lobster-pot metaphor by way of illustrating mind-traps. Three points emerge from the mind-trap theory. Firstly, whichever mind-trap we might find ourselves in, there is a means of escape. Secondly, escaping from one mind-trap leads us straight into another. Lastly, we in effect become freer as a result of each escape in the sense that we have a memory of all the mind-traps that once trapped us. Our minds have become enriched and our ability to make decisions improves.

Vickers therefore contends that participants in a debate may hold part of the combination for each other participant's current mind-trap. Participation in debate enables people to see more clearly the views, perceptions and reasoning of others. Debate also enables participants to learn from one another. Weisbord (1987, p251) describes a similar philosophy when he discusses whole systems improvement (in contrast to problem solving) as a way of creating productive workplaces :

"Systems can be improved only to the extent that everyone who works in them understands how they work. Dignity and meaning come from deep engagement. Helping people rethink the whole system is the best way a systems consultant can reinforce dignity, meaning and community. That requires a qualitatively different activity from simply soliciting input."

Flood (1993) identifies Strategic Assumption Surfacing and Testing (Mason and Mitroff) and Interactive Planning (Ackoff) as two methods that may be used to facilitate open debate and participation.

Freedom by disemprisoning:

When designing freedom and/or when freedom by debate fail people become emprisoned. The reason for this is because these methods are often used to serve particular people's interests. This lack of freedom may be structural, conceptual or both. The key to disemprisoning people is to empower them with the knowledge that they are subject to the interests of others. Such knowledge may help to break concretised conceptual traps that support coercive structure in society. Although very little practical research has been conducted in disemprisoning, Critical Systems Heuristics (Ulrich) is offered by Flood (1993) as a possible method that can be used.

Summary

TQM then embraces three concepts:

- An holistic approach should be taken when tackling challenges and problems.
- Customer or client requirements should be completely met.
- Everyone in the organisation should take full responsibility for his/her processes.

TQMs philosophy is based on *systems thinking which implies that within an organisation a complex network of inter-relationships between suppliers and clients exists. These interdependencies must be highly collaborative if the overall objectives of the organisation are to be realised. Naturally, this network of internal suppliers and clients exists not only within the organisation itself, but also between the organisation and its external clients and suppliers. Systems thinking provides a way of achieving this collaboration.

The 10 principles of TQM emphasise, amongst other things, the need to rigidly adhere to clients' requirements the first time, every time. This is achieved by ensuring that preventative thinking is inculcated, processes are continually improved and creative solutions to problems are sought.

*Systems thinking is dealt with in more detail in the next section.

Traditional management theory says that the organisation's primary objective is profit and it assumes that staff are predominantly motivated by income. TQM completely overturns this theory by propagating that the focus should be on providing customer satisfaction, and that profit will be a natural consequence. It also argues that staff are motivated by more than just money; they are also motivated by the responsibility and trust invested in them.

The dominant theme that emerges throughout the TQM philosophy is the importance of the individual. Flood calls this 'human freedom' and reasons that this may be obtained through:

- design or redesign of jobs, management practices/roles, structures and processes
- discourse with and participation of employees
- 'disemprisoning' which means that employees are not disempowered by others' rank and credentials.

TQM, a revolutionary philosophy, is clearly juxtaposed to traditional management theory. It requires radical and pervasive change within an organisation.

SECTION 7: LITERATURE REVIEW:

TOTAL QUALITY MANAGEMENT AND SYSTEMS THINKING

Although briefly touched on in the previous section, this section will attempt to further show that TQM and systems thinking are closely related. That is, for TQM to be successfully implemented in organisations, it needs to embrace and integrate systems thinking principles into its philosophy and approach. We will examine the concepts system and systems thinking in some detail, explore systems thinking applications and then point out how systems metaphors may be used to help organisations deal with their complex problems.

Systems thinking proposes a whole or total approach to quality management. Comprehensive ways are sought for dealing with complex issues, where everyone participates and all major issues are addressed.

What is a system and what is systems thinking?

For many centuries scientists believed that the best way to learn more about something they didn't understand was to take it apart and find out what it was made of. This approach was successful in the spheres of biology, chemistry and physics, but it also led to an extreme practise called "reductionism" - the idea that something is nothing but the sum of its parts. This practise, also known as mechanistic thinking, had its shortcomings. The problem was that mechanistic thinking failed to explain in a satisfactory manner the interrelated behaviour of complex phenomena. A group of researchers then began to make a study of the ways in which all different kinds of systems were organised. They made a startling discovery: no matter how different the ingredients of different systems looked, they were all put together according to the same general rules of organisation. A new field emerged known as "general systems theory". Systems thinking developed, therefore, as an alternative to mechanistic thinking, and proved itself more satisfactory for explaining not only complex biological but also social phenomena.

It is against this background that a definition of a system and of systems thinking can occur. Common agreement exists amongst authors in terms of definition. Kauffman (1980) sees a system as a collection of parts which interact with each other to function as a whole. Flood and Jackson (1991) consider a system to be a complex and highly interlinked network of parts which exhibit synergistic properties, where the whole is greater than the sum of its parts.

The central concepts of a system are shown in figure 2.

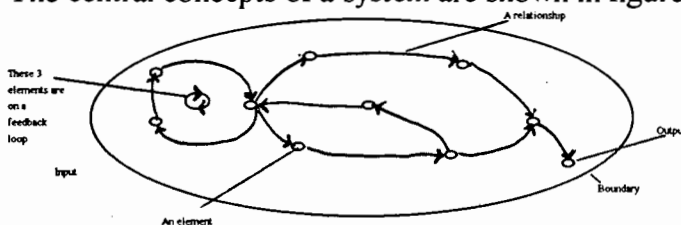


Figure 2. A general concept of a system (Flood and Jackson, 1991, p.6)

Flood and Jackson (1991) view a system as consisting of a number of elements and the relationships between these elements. Boundaries may be drawn to identify those elements that interact with one another more frequently than other elements. The system identified by a boundary will have inputs and outputs, which may be physical or abstract. The system transforms inputs into outputs. The processes in the system are characterised by feedback, whereby the behaviour of one element may feed back, either directly from another element by way of their relationship, or indirectly via a series of connected elements, to influence the element that initiated the behaviour.

A system that maintains an identity and stable transformation processes over time, in changing circumstances, is said to be exhibiting some form of control. A system can have strong or a weak identity. Through many changes it can either preserve or lose its identity. One can speak not only of the identity but also of the potential of a system. The systems of living organisms bear within them a potential which enables them to manifest the identity of their kind throughout many metamorphoses, for instance a plant proceeding from seed to blossom. If the potential is too weak, the process will peter out half-way.
(Lievegoed, 1991)

A system stabilised by its control mechanism, and possessing an identity, can be further understood through its emergent properties. These are properties relating to the whole system but not necessarily present in any of the parts. Emergent properties occur where a complex interconnected network exhibits synergy such that "the whole is greater than the sum of the parts." (Flood and Jackson, 1991)

Every system is part of a larger system. In other words, systems occur in hierarchies where every system is a sub-system of a wider system. In an organisation every department can be regarded as a system and examined as such. Or one could regard the totality of marketing or sales as a system. The boundary of an organisation therefore, can be drawn according to the task it has to fulfil in the greater system of which it is a subsystem, i.e. the national economy or the world economy. According to Checkland (1981), in addition to the boundary of the system, the relevant internal variables are selected and determined by an observer/describer who for some reason of his/her own wishes to describe it holistically, i.e. in terms of whole entities linked in hierarchies with other wholes. The observer's description will contain: his/her purpose, the system(s) selected, and various system properties such as boundaries, inputs and outputs, components, structure, the means by which the system retains its integrity, and the coherency principles which make it defensible to describe the system as a system.

Systems thinking implies thinking about the world outside ourselves, and doing so by means of the concept system. It makes conscious use of the particular concept of wholes captured in the word 'system' to order one's thoughts. A system is the way we organise our thinking about "reality" so that we can make sense of it. 'Systems practice' then implies using the product of this thinking to initiate and guide actions taken in the world. (Checkland, 1981). Senge (1990, p.69) defined systems thinking as "... a discipline for seeing wholes. It is a framework for seeing interrelationships rather than things, for seeing patterns of change rather than static snapshots".

Knowing then a little about what systems thinking is and that it is closely associated with TQM, how can it be effectively applied to TQM?

System Thinking Application

Senge (1990, p.69) contends that we need systems thinking today more than ever before because we are becoming overwhelmed by complexity; "... perhaps for the first time in history, humankind has the capacity to create far more information than anyone can absorb, to foster far greater interdependency than anyone can manage, and to accelerate change far faster than anyone's ability to keep pace." Systems thinking is a discipline for seeing the structures that underlie complex situations, and it offers a language that begins by restructuring how we think. One application therefore lies in its usage by modern management to deal with ever increasing complexity and difficult problems.

Problems are seen by Ackhoff (1974) as conceptual constructs abstracted from complex situations that are systems of interacting problems, i.e. messes. Solutions are also abstractions. No problems are ever finally put to rest. Therefore, solutions require control, continuous maintenance and improvement. He propagates a form of interactive planning that approximates an explicitly formulated ideal as closely as possible, and that allows for continuous revision of that idea. This planning is participative, co-ordinated, integrated, and continuous.

Systems thinking therefore helps management to deal with complex problems (messes) by developing novel and insightful appreciations of messes, rather than encouraging us to see them as all the same. This is done by using metaphors of organisations that provide guidance in seeing and understanding organisations in distinctive ways. Metaphors facilitate creative thinking by creating images of organisations and they also provide explanations of organisational life. Each image created by metaphors gives insights into different issues of varying importance. The method of analysis can be used as a practical tool for diagnosing organisational problems and for exploring the implications raised by this kind of analysis. Four kinds of metaphors will be discussed in some detail shortly.

Another way in which systems thinking has been applied to TQM is in terms of the systemic concepts: communication; control, hierarchy; and emergence (after Checkland, 1981). These systemic concepts are used by Flood (1992) to facilitate the formulation and the implementation of the TQM philosophy. These systems concepts need further explanation:

Communication:

Both external and internal communication are an integral part of the TQM philosophy and care must be taken to focus on it. Because external standards cannot be maintained without having equal and complementary internal standards, internal communication must be maintained and improved with other departments and divisions, i.e. internal customers. An organisation must also maintain and improve external communication with customers and suppliers. Training programmes may be used to develop the skills of those who interact with external customers.

Three types of internal communication need to be worked on:

- Down the line communication: that is, using team briefings to achieve desired and actual quality standards.
- Consultation: that is, calling on the widest possible expertise in an organisation to improve working methods.
- Lateral communication: this means involving the relevant people in other divisions in the development of new products and strategies.

Control:

Control is closely related to communication. People should be organised into small, manageable teams (4 to 15) to promote effective control. Three dimensions are important here:

- 'Accountability' has to be properly established and principal lines of control decided upon.
- 'Quality control' and monitoring standards must be every line manager's responsibility.
- 'Management information systems' should provide the information required to make effective control decisions.

Hierarchy:

Like the above concepts, hierarchy and emergence are also closely linked. Hierarchy is based on the principle that every system is a sub-system of a wider system. This systemic concept embraces the application of what Stafford Beer (as referenced by Flood, 1993), refers to as the viable-system model. This model replaces the traditional hierarchical tree in organisations with two unique ideas.

The first idea has to do with the five main management functions in organisations (policy formulation, intelligence, control, co-ordination and implementation) and their organisation as a viable system-in-focus. The second notion is the one of recursion which means that a viable system-in-focus is a systemic part of a less-focused viable system and contains in itself viable systems. The viable-system model replaces a mechanical-coercive representation of organisations with a viable one.

Emergence:

Emergence means that the whole is greater than the sum of its parts. The whole has properties that cannot be found in its parts. TQM is concerned with wholes and their properties which provide organisations with a way of viewing and interpreting themselves as a hierarchy of such interconnected and interrelated wholes.

Metaphors/mental models of organisations

Reference was made earlier to how systems metaphors may be employed to encourage creative thinking about organisations and the difficult issues that confront managers. Once conclusions are reached about which metaphor(s) most expose an organisation's main concerns, decisions may be made about appropriate organisational interventions.

Morgan (1986) believes that our theories and explanations of organisational life are based on metaphors that lead us to see and understand organisations in certain ways. A metaphor is often just regarded as a device for embellishing discourse, but its significance is greater than just this. A metaphor is used whenever one attempts to understand one element of experience in terms of another. Thus, a metaphor proceeds, through implicit or explicit assertions that say A is (or is like) B. When we say that a particular individual has lion-like characteristics, we use the image of a lion to draw attention to these lion-like aspects of the man. The metaphor thus frames our understanding of the man. (Morgan, 1986)

One of the interesting aspects of a metaphor rests on the fact that it always produces a kind of one-sided insight. In highlighting certain interpretations it tends to force other interpretations into a background role. For this reason, Linstone (1988, p.312) urges the use of several metaphors (or what he calls 'perspectives') in addressing complex problems:

"The different perspectives force us to distinguish how we are looking from what we are looking at. We see the system through different filters. The perspectives do not represent different mathematical models but very different sets of underlying assumptions, axioms, or paradigms".

Linstone's multiple perspective approach (he discusses three: technical, organisational, and personal perspectives) assumes that each perspective reveals inherently different characteristics and properties. Each perspective yields insights on a system that are not attainable with others.

It is easy to see how this approach has relevance for understanding organisations and management, for organisations are complex and paradoxical phenomena that can be understood in many different ways. Many of our assumptions about organisations are metaphorical, even though we do not recognise this. For instance, we may assume an organisation's functional requirement (like that of machines) is reliable and has efficient performance, with no deviation. As a result of this kind of thinking we may attempt to implement a bureaucratic structure with downward control in accordance with certain standardised procedures.

By using different metaphors to understand the complex ambiguous and paradoxical character of organisational life, one is able to manage and design organisations in ways that will allow for enhanced organisational performance.

Morgan (1986) focuses on a number of key metaphors that have relevance for understanding a wide range of organisational situations. He acknowledges that there are other metaphors that can produce their own special insight. For the purpose of this project/thesis the following four metaphors will be discussed: machine, organism, brain and culture.

Organisations as machines:

This metaphor arose to meet the challenge of mass production that initiated the Industrial Era. It was theoretically conceptualised in the Classical School of Management (Weber's bureaucracy theory and Taylor's scientific management).

A mechanistic organisation has the following characteristics:

- Certain knowledge of an organisation is arrived at by dissembling it into its smaller parts, which constitute the building blocks of reality. This is called reductionism.
- The organisation is unminded, i.e. controlled from without, by government or management, just as the owner or controller of a machine controls it from the outside.
- The functional requirement of the organisation, like that of machines, is reliable routinised, has predictable and efficient performance, with no deviation.
- A bureaucratic structure is the norm with downward control in accordance with standardised procedures.
- The aims of a mechanistic organisation are self-maintenance and the efficiency of the parts.
- People working within an organisation are expected to function without deviation, i.e., “robotically”, in terms of the rules, regulations and procedures laid down by management.
- The organisation has difficulty adapting to changing circumstances because it is designed to achieve predetermined goals; it is not designed for innovation. Just like machines, organisations are usually single-purpose mechanisms designed to transform specific inputs into specific outputs and can engage in different activities only if they are explicitly modified or redesigned to do so.
- Jobs are designed using scientific methods to calculate the most efficient way of doing things. The tasks of employees are broken down into parts. The essence of mechanisation rests in reducing complex procedures to sets of separate motions, which can then be reproduced mechanically at will.
- The compartmentalisation created by mechanistic divisions between different hierarchic levels, functions, roles and people tends to create barriers and stumbling blocks. When new problems arise they are often ignored because there are no ready-made responses. Standardised procedures and channels of communication are often unable to deal effectively with new circumstances, necessitating numerous ad hoc meetings and committees.
- The organisation frequently becomes clogged with backlogs of work because normal routine has been disrupted, and complex issues float up the organisational hierarchy as members at each level find in turn that they are unable to solve them.

- Interdepartmental communication and co-ordination is often poor, and people often have a myopic view of what is occurring, there being no overall grasp of the situation facing the enterprise as a whole.
- Mechanistic definitions of job responsibilities encourage many organisational members to adopt mindless, unquestioning attitudes such as "its not my job to worry about that" or "that's his responsibility, not mine".
- Mechanistic approaches to an organisation work well only under conditions where machines work well: when there is a straightforward task to perform; when the environment is stable enough to ensure that the products produced will be appropriate ones; when one wishes to produce exactly the same product time and again; when precision is at a premium and when the human "machine" parts are compliant and behave as they have been designed to do.

Organisations as organisms:

This metaphor arose to meet the challenge of selling in a competitive market in which anybody could acquire the ability to produce, leaving consumers with the advantage of increased choice. It is the metaphor which produced vast wealth and prosperity throughout the western world over the last 40 years.

An organismic organisation has the following characteristics:

- The organisation is seen as a complex system made up of parts that can only be studied as a whole. Subsystems have lists of needs that must be met. Action is taken to hold the organisation in the steady-state.
- An emphasis is placed on understanding relations between organisations and their environments. The organisation is seen as an open system and is best understood as ongoing processes rather than as collections of parts.
- Attention is given to the human aspect of organisations, (i.e. the human relations theory) as individuals are seen to operate most effectively when their social and psychological needs are catered for. Issues of motivation (e.g. Maslow's hierarchy of needs), leadership style (e.g. McGregor's Theory X and Theory Y), participation, democracy and job enrichment strategies are important.
- The organisation can be improved through systematic attention to the "needs" that must be satisfied if the organisation is to survive. Survival is emphasised as the key aim or primary task. Survival is seen as a process and goals are framed by a more basic and enduring process that helps prevent them from becoming ends in themselves. This contrasts with the classical focus on specific operational goals which are often targets or end points to be achieved. A focus also exists on the use and acquisition of resources that help to emphasise that the process of organising is much broader and more basic than the task of achieving specific goals.
- The organismic organisation is unminded, the "brain" of the firm being represented by the manager or management.

- It is dependent upon forces operating in the environment and the organisation believes it has little influence in the struggle for survival. It sees change as being generated externally and does not provide for proactive development. This view undermines the power of the organisation and its members to help make their own future.
- The organismic metaphor emphasises harmonious relations or "functional unity" between the parts. In reality relations are often conflictual and/or coercive.

Organisations as brains: (The neurocybernetic metaphor or "viable system" view)

This organisation has the following characteristics:

- The essential ideas of the systems model/systems thinking and the human relations theory are accepted.
- The organisation is thought of or seen as if it were a brain. The brain is used as a metaphor for organisation in a manner that promotes flexible and creative action and organisational intelligence. This metaphor emphasises active learning and control rather than passive adaptability that characterises the organic metaphor. Attention is also focused on information processing (the organisation is thought of as flows of information) and viability.
- The metaphor builds upon the concept of cybernetics. Cybernetics is a relatively new interdisciplinary science focusing upon the study of information, communication and control. An insight that emerges from cybernetics is that the ability of a system (e.g. the brain or a building thermostat) to engage in self-regulating behaviour depends on processes of information exchange involving negative feedback. Systems of negative feedback engage in a kind of error detection and correction, so that movements beyond specified limits in one direction initiate movements in the opposite direction to maintain a desired course of action. Cybernetics thus leads to a theory of communication and learning stressing four key principles. Firstly, that systems must have the capacity to sense, monitor, and scan significant aspects of their environment. Secondly, that they must be able to relate to the operating norms that guide system behaviour. Thirdly, that they must be able to detect significant deviations from these norms, and fourthly, that they must be able to initiate corrective action when discrepancies are detected. If these conditions are satisfied, a continuous process of information exchange is created between a system and its environment, allowing the system to monitor changes and initiate appropriate responses. In this way the system can operate in an intelligent, self-regulating manner.
- The importance of "learning to learn" in the organisation is emphasised. The concepts of single-loop learning (the ability to detect and correct error in relation to a given set of operating norms) and double-loop learning (the ability to take a 'double look' at the situation by questioning the relevance of operating norms) have a bearing on the organisation's ability to learn. Many organisations have become proficient at single-loop learning (institutionalised through budget, exception reporting, etc.), but the ability to achieve proficiency at double-loop learning is more elusive. Four aspects must be addressed to achieve double-loop learning. Firstly, openness and reflectivity that accepts error and uncertainty as a feature of life in complex and changing

environments must be encouraged. Secondly, recognising the importance of exploring different viewpoints in analysing and solving complex problems should be advocated. Thirdly, a focus on defining and challenging constraints should occur rather than adhering to the traditional philosophy of producing a master plan with clear cut targets. This inquiry-driven action leaves room for specific action plans to be generated on an ongoing basis and tested against these constraints for viability. The fourth principle is the need to make interventions and create organisational structures and processes that help implement the above points.

- The organisation shows a tendency toward self organisation and embraces certain principles of holographic (the brain has a holographic character) design. Four interacting principles exist. The principle of 'redundant functions' shows a means of building wholes into parts by creating redundancy, connectivity, and simultaneous specialisation and generalisation. An example of this design principle is found in organisations employing autonomous work groups, where members acquire multiple skills so that they are able to perform each other's jobs and substitute for each other as the need arises. At any one time, each member possesses skills that are redundant in the sense that they are not being used for the job at hand. However, this organisational design possesses flexibility and a capacity for reorganisation within each and every part of the system. The principle of 'requisite variety' helps to provide practical guidelines for the design of part-whole relations by showing exactly how much of the whole needs to be built into a given part. This principle suggests that the internal diversity of any self regulating system must match the variety and complexity of its environment if it to deal with the challenges posed by that environment. The principles of 'learning to learn' and 'minimum critical specification' (which were discussed earlier) show how an organisation can enhance its capacity for self-organisation.
- The organisation that is designed so that it can self-organise is characterised by high levels of innovation and creativity.

Organisations as cultures:

The following characteristics are common in such an organisation:

- A recognition that culture (i.e. the shared reality/meaning, or a socially constructed reality of values and beliefs, that deems certain social practices to be normal, acceptable and desirable) can exert a decisive influence on the overall ability of the organisation to deal with the challenges that it faces.
- The organisation understands that 'managing/engineering' culture may be a useful way of promoting the organisation as a collectivity with employees who have, and accept, a collaborative and community-like spirit.
- Corporate culture develops as an ethos created and is sustained by social processes, images, symbols, and ritual. Rituals are often embedded in the formal structure of the organisation. The attitudes and visions of senior management tend to have a significant impact on the meaning system that pervades the whole organisation.

- The organisation recognises the link between leadership style and corporate culture. Formal leaders do not have a monopoly on the creation of organisational culture, but their positions of power lend them a special advantage in developing value systems and codes of behaviour, since they often have the power to reward or punish those who follow or ignore their lead.
- Corporate culture is understood as an ongoing, proactive process of reality construction. It is understood as an active, living phenomenon through which people create and recreate the world in which they live. Organisational structure, financial reports, rules, policies, goals, missions, job descriptions, and standardised operating procedures perform an interpretative function. They act as primary points of reference for the way people think about and make sense of the contexts in which they work. These are cultural artefacts that help shape the ongoing reality with an organisation. Cohesive groups are usually those that arise around shared understandings, while fragmented groups tend to be those characterised by multiple realities.
- The organisation views organisational change as being successful only when the perceptions and values of employees are also changed, in parallel with technological and structural change. The culture metaphor thus focuses attention on a human side of organisation that other metaphors ignore or gloss over.
- The organisation sees its environment as an extension of itself and therefore its culture. It chooses and operates in environmental domains according to how the organisation constructs conceptions of what it is and what it is trying to do. The organisation organises its environment exactly as it organises its internal operations. It appreciates that it can influence its environment and therefore its future.

Lets now examine how systems metaphors may be used to assist organisations in tackling their challenges.

Total Systems Intervention (TSI)

An approach aimed at helping organisations deal with its complex problems has been developed by Flood and Jackson (1991).

TSI employs a range of systems metaphors (four of which have just been discussed) to encourage creative thinking about organisations and the difficult issues that managers have to confront. These metaphors are linked through a framework, the 'system of systems methodologies', to various systems approaches, so that once conclusions are reached about which metaphors most thoroughly expose an organisation's concerns, an appropriate systems-based intervention methodology (or set of methodologies) can be employed.

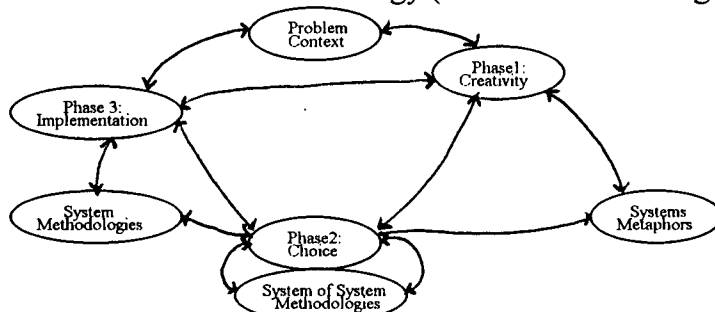


Figure 3: The process of Total Systems Intervention (Flood and Jackson, 1991, p. 55)

Flood and Jackson (1991) outline 3 phases of TSI :

Creativity:

The task during the creativity phase is to use systems metaphors as organising structures to help managers think creatively about their enterprises. Metaphors (i.e. the organisation as a machine, an organism, a brain, a culture, a team, a coalition, a prison) assist in creating images of the organisation which give insight into issues. The outcome of the phase is a dominant metaphor which highlights the main concerns and can become the basis for a choice of an appropriate intervention methodology.

Choice:

The task during the choice phase is to choose an appropriate systems-based intervention. The outcome of the phase is that there will be a dominant methodology chosen, for example, Ackoff's Interactive Planning or Beer's Viable Systems Diagnosis.

Implementation:

The task during this phase is to employ a particular systems methodology to translate the dominant vision of the organisation, its structure, and the general orientation adopted to problems and concerns, into specific proposals for change. The outcome of the phase is co-ordinated change brought about in those aspects of the organisation currently most vital for its effective and efficient functioning.

TSI abandons the notion of problems and problem solving. It provides a creative and systemic means to manage messes. It also provides new insights into TQM.

Summary

Systems thinking and TQM are closely integrated. For TQM to succeed, an holistic approach, such as is implied in systems thinking, must be adopted. Systems thinking, by nature, contradicts reductionism, as this mechanistic view fails to address the complex interrelatedness between organisational structures. Systems thinking implies that the whole is more than just the sum of its parts.

By definition, a system does consist of a number of parts, or elements which interrelate with one another. Naturally, not all elements function at the same intensity all the time. The elements within the system work together to transform inputs into outputs.

A system has an identity. It exhibits control over its ability to transform its identity, or metamorphasise.

A system is further recognised by its emergent properties which relate to the system as a whole, rather than to any of its individual parts.

A system does not exist in isolation. It interrelates with other systems, thereby forming a hierarchy of systems and sub-systems, for example, the various divisions within an organisation are sub-systems within the greater system of the organisation whole; the organisation whole is a sub-system of many other systems, such as similar systems, a particular industry, etc. The boundary of a system is determined by the needs of the observer describing it.

In its development, the world has become more complex, and a systems thinking approach has become vitally important as it restructures the way people think. Because problems are continuous, solutions need to be maintained and improved. Solutions require participative and co-ordinated planning. Systems thinking provides innovative ways to do this by offering metaphors of organisations that help managers to see and understand organisations in new and fresh lights. This greatly enriches TQM.

But metaphors are not the only way to apply systems thinking to TQM. Systemic concepts may also be utilised, these being:

- that internal and external communication are of pivotal importance and that communication should be up-down and lateral to be fully effective
- that control within the organisation must be achieved by dividing people into manageable teams that are accountable, where quality control by managers is evident and where information is efficiently managed.
- that a hierarchy of systems and sub-systems exists
- that the whole is greater than the sum of its parts and that TQM is concerned with the whole and not just the parts.

Flood and Jackson offer an intervention method (TSI) which implements the use of metaphors to solve problems, thus helping managers to choose an appropriate systems-based intervention to bring about effective change.

SECTION 8:

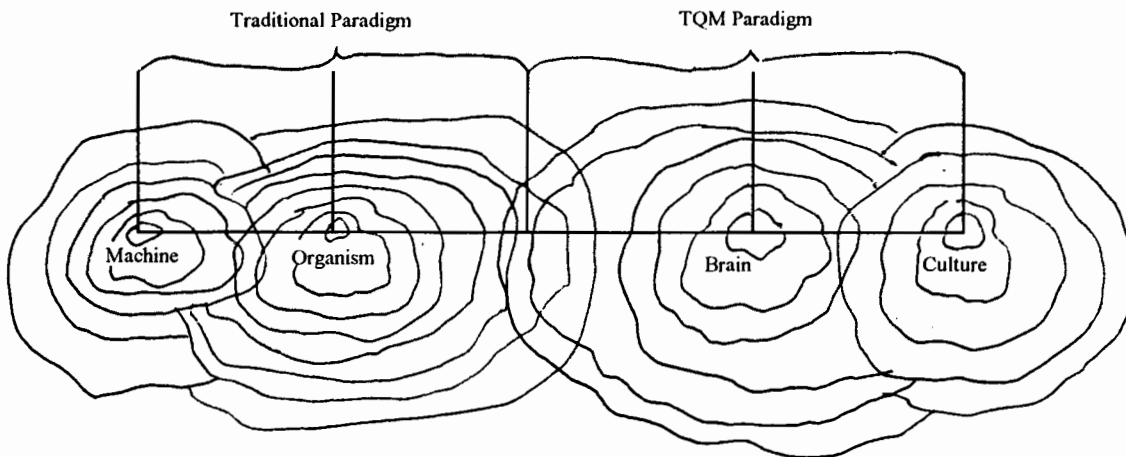
SYNTHESIS

It is necessary at this point to perform an important task. That is, to marry a component of our original hypothesis with the literature reviewed up to now.

The hypothesis, in Section 3, assumes that a dominant mental model underpins Individual Life's quality improvement process. This point needs to be comprehensively argued here.

Crosby discusses the need to implement a quality vaccine by providing a new set of values, by having committed and determined role models and by changing attitudes. Deming urges the transformation of Western style management by turning managers into leaders and by substituting a focus on results with leadership. He believes that such a transformation will require a whole new structure, from foundation upward. Deming propagates long term commitment to new learning of this new philosophy and paradigm. Grant, Shani and Krishnan also plead for a new paradigm which is quite different from those underlying conventional practices. They show that TQM calls for systematic changes in management practices, including the redesign of work, the redefinition of managerial roles, the redesign of organisational structures, the learning of new skills by employees at all levels, and the reorientation of organisational goals. Flood warns against the principles of TQM being interpreted using the traditional mechanical vision of organisations. He advocates socio-cultural systems thinking and viable systems thinking (which both have a strong humanistic orientation), as what TQM principles should be interpreted through. Weisbord, Scherkenbach, Kiefer and Senge all agree on the importance of the humanistic element.

It is clear that TQM, as a philosophy, rests on a number of metaphors. Although some aspects of TQM may fall into the machine and organism metaphors, the dominant metaphors that TQM best draws upon are the brain and the culture metaphors. This may be illustrated as follows:



A synthesis of the literature therefore shows that the mental model/paradigm underpinning the quality improvement process adopted by Individual Life falls within the brain and culture end of the above continuum. For example: education of the quality process has provided all employees with a common frame of reference and a common language, and it has provided a mutual sense of belonging to the quality culture. Both these characteristics fall squarely into the latter two metaphors.

The experts agree that in order for an organisation to effectively implement quality improvement and thus generate high performance, the dominant mental models that managers need to have are brain and culture.

The intention of my research, which follows, was to prove that the mental model of a high performing branch's manager fell within the brain/culture end of the continuum (i.e. the TQM paradigm) and visa versa for a low performing branch.

SECTION 9: METHODOLOGY:

ETHNOGRAPHY

Ethnographic interviews were used as a research technique in attempting to understand how two branch managers viewed their respective branches, in terms of their dominant mental models. Before the methodology can be fully explored, some background to ethnography is required.

The Nature of Ethnography

Ethnography is a research method that has become increasingly popular over the last few years. Spradley (1979) believes that a quiet revolution is spreading through the social sciences and many applied disciplines. He sees a new appreciation for ethnography emerging among educators, urban planners, sociologists, nurses, political scientists and many more. "There has come a profound realisation: the people we study or seek to help have a way of life, a culture of their own". (Spradley, 1979, p iii). Hammersley and Atkinson (1983) provide an alternative perspective, namely that ethnography's prominence stems largely from a disillusionment with the quantitative methods that have for long held the dominant position in most of the social sciences. Gill and Johnson (1991, p.93) see the ethnographic approach as:

"Fundamentally that of anthropology which allows the fieldworker to use the socially acquired and shared knowledge available to the participants to account for the observed patterns of human activity. The key feature of the approach is that it is based on what are termed naturalist modes of inquiry, such as participant observation, within a predominantly inductivist framework."

Two concepts, mentioned above, required further explanation. Naturalism proposes that, as far as possible, the social world should be studied in its natural state, undisturbed by the researcher. Hence, natural, and not artificial settings like experiments, should be the primary source of data (Hammersley, et. al. 1983). Ethnographers' commitment to naturalism thus leads them to argue that, in order to explain the actions of people working in organisations, it is necessary to arrive at an understanding of the various cultures found in organisational settings, for it is out of these systems of meanings, beliefs and values that rational action arises. (Gill, et. al. 1991).

The concept induction involves the construction of explanations and theories about what has been observed. In sharp contrast to the deductive tradition, in which a conceptual and theoretical structure is developed prior to empirical research, theory is the outcome of induction. Hammersley (1990) indicates that the inductive process is discovery-based, rather than being limited to the testing of explicit hypotheses. It is argued that if one approaches a phenomenon with a set of hypotheses one may fail to discover the true nature of that phenomenon, being blinded by the assumptions built into the hypotheses. Instead, one should begin research with minimal assumptions so as to maximise one's capacity for learning. It is for this reason that ethnographers rarely begin their research with specific hypotheses. Rather, they have a general interest in some types of social phenomena and/or in some theoretical issue or practical problem. As the research unfolds, its focus is narrowed and sharpened and perhaps even changed substantially. Theoretical ideas that frame descriptions and explanations

of what is observed are developed over the course of the research. Such ideas are regarded as a valuable outcome of, not a precondition for, research.

In ethnography the focus is on the manner in which people interact and collaborate in observable ways. The ethnographer participates, overtly or covertly, in people's daily lives, watching what happens, listening to what is said and asking questions. Ethnography has sometimes been dismissed as quite inappropriate to social science, on the grounds that the data and the method's findings are subjective, i.e. the method does not provide a solid foundation for rigorous scientific analysis. Others argue that only through ethnography can the meaning that gives content to social processes be understood (Hammersley, et. al. 1983). So while there are a number of divergent trends in the practice of ethnography, there seems to be some agreement that extended participant observation and interviewing are the central features of most studies. Through observation and interviews an attempt is made to learn about the culture under study and so interpret it in the way its members do.

Ethnography as a method is seen by Hammersley (1990) as having most of the following features:

- People's behaviour is studied in everyday contexts, rather than under experimental conditions created by the researcher.
- Data is gathered from a range of sources, but observation and/or relatively informal conversations are usually the main ones.
- The approach to data collection is 'unstructured' in the sense that it does not involve following through a detailed plan set up at the beginning; nor are the categories used for interpreting what people say and do pre-given or fixed. This does not mean that the research is unsystematic; it means simply that initially the data is collected in as raw a form and on as wide a front as feasible.
- The focus is usually a single group of relatively small scale.
- The analysis of the data involves interpretation of the meanings and functions of human actions and mainly takes the form of verbal descriptions and explanations. Statistical analysis and quantification play a subordinate role.

So from the above it is clear that ethnography as a method, is not far removed from the sort of approach that we all use in everyday life to make sense of our surroundings. Agar (1986, p12) explains :

"When you read a news story about the discontent of young lawyers with their profession, you wonder: What is going on here? Hypotheses, measurement, samples, and instruments are the wrong guidelines. Instead, you need to learn about a world you don't understand by encountering it firsthand and making some sense out of it."

Some of the aforementioned points will now be discussed in greater detail.

Culture and Ethnography

Ethnography is the work of describing a culture. The method's primary goal is to understand another way of life from the native (inhabitant of a culture) point of view. Spradley (1979) contends that rather than studying people, ethnography means learning from people. He argues that in order to discover the hidden principles of another way of life, the researcher must become a student: trying to discover how people define and understand their own world.

The essential core of ethnography is thus concerned with the meaning of actions and events to the people we seek to understand. Some of these meanings are directly expressed in language; many are taken for granted and communicated only indirectly through word and action. But in every society people make constant use of these complex meaning systems to organise their behaviour, to understand themselves and others, and to make sense out of the world in which they live. These systems of meaning constitute their culture. Culture, then, may be seen as "the acquired knowledge that people use to interpret experience and generate social behaviour". (Spradley, 1979 p5).

It may be assumed that people learn their culture by observing other people, listening to them and then making inferences. Children acquire their culture by watching adults and then by making inferences about their rules for behaviour. The ethnographer employs this same process of going beyond what is seen and heard to infer what people know. It involves reasoning from evidence collated (i.e. what we observe) or from premises (i.e. what we assume).

In doing ethnographic fieldwork therefore, cultural inferences are made from what people say; from the way people act; and from the artefacts people use. Every initial cultural inference made is only a hypothesis about what people know. These hypotheses must be tested until the ethnographer becomes fairly sure that people share a particular system of cultural meanings. None of the ways (i.e. speech, behaviour and artefacts) used for making inferences are foolproof, but together they may lead to an adequate cultural description. (Spradley, 1979).

Language and Ethnography

Although a number of methods may be used to make cultural inferences, it is common for an ethnographer to focus on language. Hammersley, et al. (1983, p107) remarks:

"The expressive power of language provides the most important resource for accounts. The most striking feature of language is its capacity to present descriptions, explanations and evaluations of almost infinite variety about any aspect of the world, including itself."

Every ethnographer will make use of what people say in describing their culture. Both tacit and explicit culture are revealed through speech, both in casual comments and in lengthy interviews. Because language is the primary means for transmitting culture from one generation to the next, much of any culture is encoded in linguistic form. (Spradley, 1979).

The ethnographic interview is one strategy for getting people to talk about what they know. The research conducted for this thesis will focus exclusively on making inferences from what people say. This focus on language is not intended to rule out the use of behaviour and artefacts as a basis for making cultural inferences. It is merely a matter of choosing a method that will best meet the objectives of the research.

Because interviewing can be used for other forms of investigation, it is necessary to make clear what is meant by ethnographic interviewing which leads to an ethnographic description. Hammersley, et al. (1983) believe the main difference between the way in which ethnographers and survey interviewers ask questions is not, as is sometimes suggested, that one form in interviewing is structured and the other is unstructured. All interviews are structured by both researcher and informant (i.e. the interviewee). They see the important distinction as being between standardised and reflexive interviewing. Ethnographers do not decide beforehand the questions they want to ask, though they do enter the interview with a list of issues and questions that may be covered. Nor do ethnographers restrict themselves to a single mode of questioning. On different occasions, or at different points in the same interview, the approach may be non-directive or directive, depending on the function that the questioning is intended to serve. Non-directive questions are open-ended, rather than requiring the informant to provide a specific piece of information. However, often one may wish to test out hypotheses arising from the developing theory being identified by the ethnographer and here quite directive and specific questions may be required.

An ethnographic interview methodology, which will be used in my research, is provided in Annexure 2. The methodology is exclusively based on Spradley's (1979) "Developmental Research Sequence".

Informants

Ethnographers will work together with informants to produce a cultural description. Spradley (1979) defines informants as native speakers who are engaged to speak in their own language or dialect. They provide a model for the ethnographer to imitate, that is, the ethnographer hopes to learn to use the native language in the way informants do. In addition, informants are a source of information and quite literally become teachers for the ethnographer.

Spradley (1979) points out that the informant-ethnographer relationship is frequently confused with other relationships and roles. He advises against making a friend or an employer (one's boss) an informant. In his experience, strangers usually make the best informants. Also, confusion exists with three roles used in the social sciences : subject, respondent and actor. Social science research uses subjects to test hypotheses and not to discover the cultural knowledge of the subjects. Work with subjects begins with preconceived ideas; work with informants begins with a naive ignorance. Survey research with respondents almost always employs the language of the social scientist. Ethnographic research, on the other hand, depends on the language of the informant. The questions arise out of the informant's culture. When social scientists observe actors (someone who is the object of observation in a natural setting), they must decide how to describe what they see.

So, by merely observing behaviour without also treating people as informants, their cultural knowledge becomes open to interpretation.

Ethnographers adopt a particular stance toward people with whom they work. They convey by word and by action: "I want to understand the world from your point of view. I want to know what you know in the way you know it. I want to understand the meaning of your experience, to walk in your shoes, to feel things as you feel them, to explain things as you explain them". This frame of reference is different from treating people as either subjects, respondents or actors.

To sum up, then, a collection of mental models (a set of rules that individuals use to design and implement their own behaviour as well as to understand the behaviour of others), in an organisation constitute the organisation's culture (a system of meanings, beliefs and values). Mental models lead to rational action. Ethnography helps us make inferences about mental models because informants under study are interviewed, and observed to determine, amongst other things, what rational action they take. Understanding their action means understanding their mental models.

Criteria for Assessing Ethnographic Research

Determining criteria for assessing ethnographic research may assist in determining the method's relative strengths and weaknesses and will provide some guidance for conducting the research. In effect, criteria may become what the ethnographer aims to meet during his or her research. Criteria for assessment penetrates to the heart of the relationship between ethnography and quantitative research. Some ethnographers believe that the criteria that are normally applied to quantitative research are also appropriate for qualitative research. Others argue for criteria that are distinctive to ethnography.

Gill et. al. (1991) outline criteria that might be used in evaluating research methods:

Internal validity: This refers to whether or not what is identified as the 'cause(s)' or 'stimuli' actually produce what have been interpreted as the 'effects' or 'responses'.

External validity: This refers to the extent to which any research findings can be generalised beyond the immediate research sample or setting in which the research took place. External validity is often subdivided into population validity (i.e. possibility of generalising from the sample of people involved in the research, to a wider population) and ecological validity (i.e. possibility of generalising from the actual social context in which the research has taken place and data thereby gathered, to other contexts and settings).

Reliability: This refers to the consistency of results to the consistency of results obtained in research. It should be possible for another researcher to replicate the original research using the same subjects and the same research design under the same conditions.

Armed with these criteria, Gill et. al. (1991) go on to evaluate ethnography as a research strategy and thereby elucidate its potential strengths and weaknesses. They believe that because ethnography is committed to induction and unstructured methods of data collection,

problems regarding replicability and therefore reliability are created. Moreover, since ethnography usually entails the intensive study of a small number of cases, its claims to population validity are usually considered to be limited to the actual phenomena under investigation during fieldwork. Although this apparent limitation regarding population validity has been thoroughly disputed by Michell (1983), [who is cited by Gill et. al. (1991)] and others in their discussion of the use of analytic induction, the main strength of ethnography is generally considered to be ecological validity. This is because the research takes place in the natural setting of the everyday activities of the subjects under investigation. Contamination of the subject's behaviour by the researchers themselves and the methods they use for collecting data is therefore reduced.

Where ethnographers are concerned with inductively generating grounded theory, their commitment to naturalism may often obstruct their establishment of control and experimental groups and hinder their ability to manipulate independent variables. In other words, it is considered to have difficulties regarding the clear establishment of cause and effect relationships and is consequently taken to be low in internal validity. Gill et. al (1991) assert that the criticism that ethnography is low in internal validity is increasingly open to question. This is because large amounts of qualitative data are produced by ethnographers which enables them to identify and include in subsequent theoretical analysis, many of the important factors that did not form part of his or her preconceived notion of the situation. When this process is combined with forms of analytic induction, which allow for the establishment of what are in effect control and experimental groups, the internal validity of the ethnographer's theoretical conclusions may well be very high in comparison to many of the deductive approaches.

Hammersley (1990) argues that the quantitative concepts of reliability and validity, while useful in identifying important considerations in the assessment of research, do not provide a clear and coherent, or sufficient, conceptual basis for such assessment. One of the problems he discusses is that there exists diverse ways in which the terms validity and reliability are used. There is divergence, for instance, about whether they refer to properties of measurement instruments, of observers, or of particular measurements; and about whether they are defined by the relationships between findings and the properties being measured, or in terms of a relationship among findings produced by different measurement instruments.

Hammersley (1990) believes that the most important question that needs to be asked before criteria are decided on is: What is research for and what function should it be designed to serve? In his view, the function of research is to produce knowledge that is of public relevance. He sees this goal and the criteria that derive from it, apply as much to ethnography as to other sorts of social research. Hammersley develops a different framework around the concepts of 'validity and relevance' as a means of assessing the value of research.

By 'validity' Hammersley (1990) means truth which is interpreted as the extent to which an account accurately represents the social phenomena to which it refers. He lists three steps in assessing the validity of ethnographic claims:

- The first step is to determine whether an ethnographic claim is plausible; that is, whether we judge it as very likely to be true given our existing knowledge.

- The second step is to determine whether an ethnographic claim is credible; that is whether it seems likely that the ethnographer's judgement of matters relating to the claim would be accurate given the nature of the phenomena concerned, the circumstances of the research, the characteristics of the researcher, etc.
- Thirdly, where it is concluded that a claim is neither sufficiently plausible nor sufficiently credible, further evidence will be required of its validity. When the evidence is examined, the same means will have to be employed to assess its validity as is applied to the claim itself: its plausibility and credibility and, of course, further evidence may be required to support that evidence, which shall again be judged in terms of plausibility and credibility.

In Hammersley's (1990) view, research findings to be of value must not only be valid but also be 'relevant' to issues of public concern. He argues that this must not be interpreted as implying that every research project, and even less so every research report, must make a direct contribution of knowledge required by some narrowly defined group of practitioners. Rather, researchers must be allowed, firstly, to address issues which are not of immediate concern to practitioners but which there are reasonable grounds for believing are of relevance to their practice and secondly, to address a wide variety of practitioner audiences.

SECTION 10:

USE OF ETHNOGRAPHIC RESEARCH

The goal in ethnography, as outlined in the previous section, is to discover and describe the cultural meaning system that people are using to organise their behaviour and interpret experience. Meaning always involves the use of symbols. Although symbols can be created from anything in human experience, the Developmental Research Sequence (DRS) focuses on linguistic symbols. Linguistic symbols form the core of the meaning system of every culture, and with these symbols, communication occurs about all other symbols in a culture. Ethnographic interviews are one means for gathering a sample of linguistic symbols.

In conducting ethnographic interviews with branch manager A and branch manager B, answers to the following questions were sought in order to make inferences about the dominant mental model that each branch manager had:

- What did the branch manager say, feel and how did he explain things that reveal the tacit and explicit culture of the branch? (i.e. what linguistic symbols were used?)
- What cultural inferences could be made by what the branch manager does? What does this behaviour explain?
- What internal logic exists for him?
- What assumptions are the branch manager's meaning system based on?
- What rules govern his meaning system?
- What theory can be developed from the information collated and into which mental model category (i.e. machine, organism, brain or culture) does it best fit?

Although ethnography is primarily concerned with inductively generating theory, rather than testing an explicit hypothesis, the above questions and the original hypothesis provided some structure and a point of departure for the research. Care was taken not to make preconceived assumptions based on the hypothesis that would contaminate the research.

The ethnographic DRS method is based on a developmental sequence of specific tasks necessary to complete each of the following major steps:

- Locating the informant
- Interviewing the informant by asking descriptive questions
- Analysing the information by making a domain analysis
- Interviewing the informant again by asking structural questions
- Making a taxonomic analysis

- Interviewing again by asking contrast questions
- Making a componential analysis of the information generated
- Then, cultural themes are discovered
- Finally, the ethnography is written

A detailed explanation of the DRS method is provided in Annexure 2. At this point it is appropriate to give a brief synopsis of how it was used.

The DRS method began by locating the informants (in this case, branch managers A and B) and conducting interviews using descriptive questions. Initially, the main purpose was to collect a sample of linguistic symbols. We know that ethnography is the study of cultural meaning systems; it is also the search for all the relationships among symbols. So descriptive questions were asked to uncover the branch manager's folk terms (a cultural symbol or category) and their relationships. In order to find how these folk terms were organised, a domain analysis (a search for the larger units of cultural knowledge called domains) was conducted. In making a domain analysis, semantic relationships were used as they structure domains. By repeating the steps for making a domain analysis, and by using structural questions, a list of domains were identified. This gave an initial overview of the cultural scenes in the branches.

Next, an in-depth analysis of a few selected domains occurred. Using the technique of taxonomic analysis (a search for the internal structure of domains), new relationships among folk terms were discovered. This also revealed the internal structure of domains. The informants were then interviewed again and contrast questions were asked. This shifted the focus from looking for similarities among folk terms (and for their inclusion in domains and taxonomies) to a focus on differences. Contrast questions are based on the principle that states that the meaning of a symbol can be discovered by finding out how it is different from other symbols.

The next step in the DRS method was a componential analysis. A systemic search for the attributes (components of meaning) associated with cultural symbols happened. This information was then synthesised and cultural themes were extrapolated. These are larger units of thought that people believe to be true and valid. Cultural themes are assertions that have a high degree of generality in that they apply to numerous situations. They sometimes appear as folk sayings, mottos, proverbs or recurrent expressions.

Annexure 3 is the taxonomic analysis and componential analysis for the two branch managers.

The cultural themes discovered and conclusions inferred from the research is discussed in the next section.

A critique of the methodology used

A critique of the DRS methodology is required in terms of my personal experience of its strengths and weaknesses. The criteria for assessing ethnographic research, discussed previously, is used as input.

The DRS methodology provides an exciting opportunity to discover how informant's organise their culture. It is a method that guides one in uncovering realities that others have learned and use to make sense out of their worlds. Its sequenced tasks are of great assistance when one, as I was, sets out trying to learn the skills for doing ethnography. Each of the DRS's larger tasks is broken down into many smaller ones that simplify the work of asking ethnographic questions and making ethnographic analysis. Its sequenced and systematic approach has built-in checks and balances that help guard against the need to impose order from the outside.

In my view the DRS method produced data that meets Hammersley's criteria for ethnographic validity, that is, plausibility and credibility. People who know the branch environment well, for instance Individual Life management, are likely to judge the data and inferences made as likely to be true and accurate. This is because the information, in my opinion, has face validity in that it conforms to what is already known about the branches. It adheres to the conventional wisdom that already exists. This contention is made even though certain weaknesses may be associated with the method.

One of the weaknesses of the DRS method is its sole reliance on interviewing. It is only possible to do a partial description of selected aspects of a culture by means of ethnographic interviewing. Ideally, informant observation should supplement the DRS method. For practical reasons observation was not possible for the research conducted for this thesis/project.

Another weakness is that the method does not systematically examine how to integrate data from multiple informants to produce an ethnographic description. The focus is on working with a single informant, in order to show how one can learn ethnographic interviewing and analysis skills. Spradley acknowledges this limitation and suggests that a complete ethnography can seldom just be done with a single informant. Again, only a partial description of selected aspects of a culture can be made from one informant's point of view. In order to make generalisations about a culture, the ethnographer will need additional informants as well as data from other sources.

Additional shortcomings, that I introduced whilst following the DRS method, will be covered in section 12: An account of how the project was managed.

SECTION 11:

RESEARCH RESULTS AND CONCLUSIONS

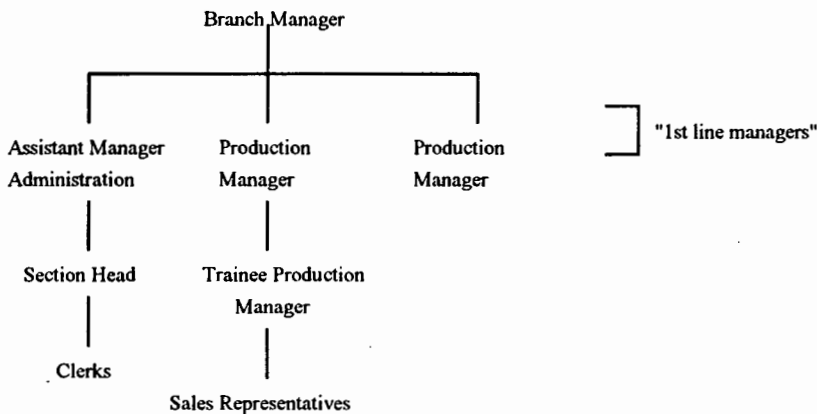
The results of the ethnographic research are set out below in the form of cultural themes. Cultural themes link a number of symbols into meaningful relationships and also connect some of the larger relationships among domains.

Discovering cultural themes: Branch A:

- Branch A is situated in a large building and it occupies a number of floors. Branch managers in the Old Mutual have a great deal of position power, probably more than that enjoyed by those who are on the same job evaluation grade as branch managers at Head Office. The branch manager is accountable for the viability and profitability of the branch. This is measured by branch statistics and indices (i.e. total issues policies per manmonth, commission content persistency and controllable expenses).

An air of formality exists at Branch A. I was told that "Mr branch manager A" will see you in a moment" before my appointments and I was kept waiting for a few minutes on each occasion. (A less formal atmosphere exists at Head Office). The size of branch manager A's office is impressive and it is bigger than the ones his counterpart's occupy at Head Office.

- The structure of Branch A is as follows:



The branch manager maintains this organisational structure fairly formally in the manner he appoints, plans, controls and interacts with his staff. For instance, his formal meetings and his performance appraisal discussions occur only with his immediate subordinates. It is an organisation structure that is common to all branches through the company.

- Formal meetings are the most common means of controlling the branch operation. A biweekly management meeting is held involving first line managers, he regularly has a first line manager meeting with each of his managers, he conducts a financial review meeting again involving first line managers, he holds an assistant manager (admin.) meeting and a daily meeting with his secretary. Each meeting has its own specific purpose, but generally the trend that emerges from each meeting is a focus on business results, expense management and the measurement of performance. The branch manager always controls these meetings (i.e. he is in the chair) but he expects participation from all involved.
- Although branch manager A does have regular contact with his administration head, his major focus is on the sales force.
- Branch manager A considers his daily "walk-about" as his most important priority. "I see this as PRO, were I simply pop in to establish contact and to congratulate ... I try not to talk a lot. I just ask questions." He uses this as an opportunity to see and talk to his sales staff members. He asks about progress being made in terms of sales, he congratulates, coaches where applicable, and generally considers it as an opportunity to motivate. He believes that this contact has an important bearing on marketing and productivity. It is an activity that will help his sales representatives and branch achieve results.
- Of all the things done by the branch manager, he likes the "walk-about" and certain meetings the best. These are his biweekly management meeting, the first line manager meeting and his financial review meeting. As mentioned previously, these activities enable the branch manager to maintain contact primarily with his sales force and to focus on productivity and results.
- Many of the activities performed by branch manager A involve investigation, analysis and a focus on dealing with (i.e. curtailing) expenses and costs. He does this by spending time on branch statistics and bonus structure feedback he receives from Head Office, by referring to his management function guide (which list his goals and objectives and standards), by handling his incoming mail, by investigating certain scenarios, etc.
- The branch manager sees motivation as his second most important activity. In addition to his "walk-about", he regularly organises little functions, brings guest speakers to the branch, rewards and recognises achievements with lunches and he uses certain company-wide award and incentive programmes to motivate his sales force to greater achievements. "The branch is a very mixed branch in terms of nationalities. I have Portuguese, Israelis, Scandinavians and Englishmen. An organised happy hour will not motivate everybody. One lady sold 9 policies last week. A simple thank you is more important to her than a happy hour because she is too busy."
- The branch manager believes that finding the "right man for job" as been one of this most difficult challenges. His sales background has not equipped him with the required interviewing skills. He always conducts the final interview and usually likes to meet with the interviewee's spouse.

- A stable work force (i.e. sales representatives that have been with the branch between 20 and 36 months and longer) is considered by branch manager A as the most important reason for the success of his branch. (He readily acknowledges that it is a successful branch). He considers the life assurance industry as a difficult one and only a certain kind of person makes a successful career for him/herself in the business.
- The branch manager sees his first line managers as being the second most important reason for the success of his branch.
- A quality council exists in the branch. "I'm very proud of it. I'm not involved and it is run by a sales representative. One doesn't often find this. They look at processes ... I get minutes of the meetings and take up issues on their behalf".
- Branch manager A will often give advise or even do a role play with his sales staff "You say you're having a bit of a problem in getting an appointment, show me how you do it and I'll give you feedback".

Discovering cultural themes: Branch B:

- The structure of Branch B is the same as for Branch A. The branch manager believes that the organigram starts with his sales representatives as this is where the business starts. Branch B is a smaller branch, in terms of staff numbers, than Branch A. It occupies a single floor of a large building in one of Cape Town's suburbs.
- Formal meetings are the most common means of controlling the branch operation. Seven kinds or types of meetings are conducted. The meeting that involves almost the whole branch occurs every Monday morning and it has a primarily communication or information-sharing purpose. The branch manager also calls this meeting his "motivation session". It has a strong business results, problem solving, recognition and reward flavour to it.
- He also motivates during meetings by "giving feedback on the progress we're making as a branch, as a region and as an organisation. We all work on targets and its important to see what's happening. I use graphs ... (with various branch statistics plotted). People want to know how they're doing. Its very motivational".
- Branch manager B considers his personal planning and preparation as his most important priority. It has a direct impact on the procurement of new business. The procurement of new business is a central theme in most of the activities that he is involved in. It permeates into and is one of the reasons for not only his planning, but also for the time he spends out of the office, for the recruitment done, the recognition given, the performance appraisals, the training and development and for the entertaining he does.
- The focus of branch manager B is on his sales force. For example, the training and development that he personally gets involved in is aimed at the representative and their managers.

- Performance appraisals are considered as the second most important priority, his "walk-throughs" (branch manager A used the term "walk-about") as his third and recruitment as the fourth priority.
- The branch manager enjoys his daily walk-throughs the most of all his activities. He establishes contact with his staff, listens to ideas and talks about sales forecasts.
- Providing recognition to others is the second most enjoyable activity. Manager B considers his biggest challenge is to make his people feel good about themselves. The notion of motivation features strongly in the terminology he uses and in his behaviour.
- He works long hours, between 10 and 11 hours each day.
- The branch manager frequently asks for marketing ideas and in interacting with others, he seeks opportunities to challenge others in this regard. These are geared toward increasing sales.
- Branch manager B acknowledges ("very mediocre performance") that his branch is not doing as well as it should be. He sees the lack of established sales staff as being the primary reason. "Having an established sales force means a lot of other things. It means access to the upper market, superior knowledge and skills. This comes with experience. With experience comes more confidence and refined skills". Inefficient first line managers are seen as the second most important reason for the branches' performance.

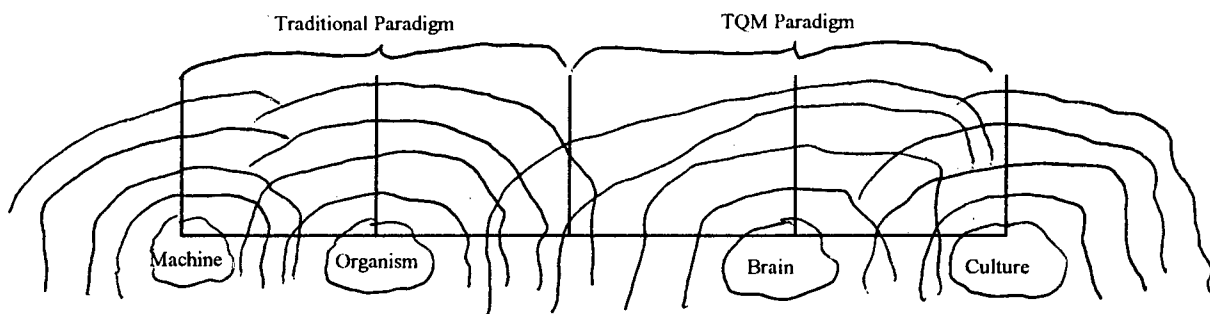
Once the research results were formulated, it was necessary to reflect holistically on emerging trends in order to infer the cultural scenes of the two branches. Certain conclusions came to the fore.

Conclusions and inferences

The inductive process followed in this thesis led to the discovery of the following conclusions and the development of the following theory:

- Both branch managers maintain a vertical, primarily top-down hierarchical structure, with the branch manager at the apex. The structure provides the branch managers with a great deal of positional power. Systems and processes within the branches (for example, performance appraisals) are so designed to support the structure. Flows of information and communication occur vertically.
- Both Branch A and Branch B have as a central goal, the achievement of sales targets. The procurement of new business is central to the survival of the branch and its staff members (particularly the sales representatives). Systems and processes (for example, branch statistics and bonus structure feedback) within the branch are developed to measure progress toward, and deviation from sales targets. In addition to sales results, expense management enjoys high priority. These two variables keep the branch viable.

- Both branch managers' roles are geared toward meeting the branches primary objectives, i.e. business maximisation and expense management. Almost every activity performed focuses on these objectives. Both branch managers emphasise motivation, tight controls, recognition, and formal rewards. Incentives are individual in nature and are linked to quantitative performance in the short term. People management occurs through performance appraisals, meetings, sharing of information, recruitment, motivation, etc. and is focused on the branches' primary objectives.
- Both branch managers believe that a stable and competent sales force leads to success. Most of their time and effort goes into the sales representatives.
- Both branch managers also believe that an important factor for success is competent first line management.
- It is not possible to differentiate between branch manager A and branch manager B in terms of their dominate mental models, as manifested by what they say and what they do. Their mental models are the same. Their mental models fall within the conventional/traditional side of the continuum:



- Therefore, the original hypothesis is not proved. That is, branch manager A (who heads the high performing branch) does not have a mental model that is implied by Total Quality Management philosophy.
- No distinction exists between the two branch manager's mental models because they both are the products of the same system. In reporting to the same regional manager, they have the same role model. They both respond to the same set of measurements and reward system. Both have the same formal structure of jobs and reporting relationships defined in written job descriptions and organisational charts.
- No plausible reason can be offered for the fact that Branch A is more successful than Branch B, in terms of the branch managers role. We know that the most critical success factor is a stable and experienced sales-force, but it is not known what branch manager A does differently to branch manager B to make this a reality.

Whilst my limited research did not prove the correlation between high-performance and the brain/culture model, it is of note that competence and experience (characteristics of Branch As sales-force) play a vital role. All the experts reviewed in my literature study support this notion.

My question is: What role does branch manager A play in creating a set of circumstances that nurtures competence in the sales force and that retains these successful people for longer than that of Branch B? It is my recommendation that this question be further researched.

Whilst not proven, it is my view (and literature supports this) that Branch A would enjoy greater, and more importantly, continued success, should there be a paradigm shift i.t.o. the way the branch manager views his organisation.

A paradigm shift (or mental model change) requires significant change, organisational change. One possible explanation of why the two branch manager's mental model fall within the traditional side of the continuum and why they have not moved to the TQM end is offered by Argyris (1991). He believes that the mental models ("theories-of-action") that people actually use is rarely the one they think they use. Argyris (1991) calls the theory-of-action that a person uses: "theory-in-use" and the one they think they are using, their "espoused" theory of action. He states that people are unaware of the contradiction between their espoused theory and their theory-in-use, between the way they think they are acting and the way they really act. Closing the gap is difficult because individuals (particularly senior managers in organisations who seldom experience failure) feel threatened by the prospect of critically examining their own role in the organisation. Argyris (1991) points out that this defensiveness inhibits learning and that "double-loop learning" (referred to under the brain metaphor) is required to help managers reason productively.

SECTION 12:

AN ACCOUNT OF HOW THE PROJECT/THESIS WAS MANAGED: A CRITICAL REFLECTION

Certain decisions are invariably made before and then during the course of the project/thesis that affect the outcome of the project. In hindsight one recognises that certain things could have been done differently that could have yielded better results.

One of the things that may have been done differently was to interview more than just the branch manager in each of the branches. Only a partial description of selected aspects of a culture can be made from one informant's point of view. Additional branch staff members could have been selected randomly and then interviewed to provide a more complete description of the cultural scene. However, it should also be pointed out that because of the in-depth and intensive focus of the DRS method, more interviews would have considerably broadened the scope of the project.

Supplementing the ethnographic interviews with observation would have provided insightful qualitative information that would have led to a better understanding of the cultural scene. For instance, I could have attended meetings that the branch managers held, or even spent a full day with the branch managers observing their behaviour and action. This would have led to a better understanding of their mental models.

The DRS method can never be fully comprehended, no matter how much reading one does about the method, until one practically uses or applies it. Prior experience would have helped a great deal in equipping me with the necessary skills and confidence in using the method. Upon reflection, I should have experimented with the method (perhaps on a colleague or my spouse), before the interviewing the branch managers.

Both my informants (the branch managers) were aware that I had agreed to give their senior feedback once my research was concluded. In addition, because I was obliged to give them an overview of what I was setting out to achieve, both knew that the one branch manager represented the high-performing branch and the other the lower-performing branch. This was clear from the way they provided me with unsolicited information on why they believed their branch was "successful/unsuccessful". Their prior knowledge of this may have influenced their conversation with me. Some thought should have gone into overcoming this issue before the commencement of the interviews.

A barrier to discovering domains (i.e. symbolic categories) during ethnographic research, comes from the ethnographer's cultural background. I went into the interviews with an array of analytical categories that are not easy to put aside. This was because my own prior knowledge of the culture of Individual Life. So, the imposition of my own analytical terms (i.e., cover terms and domains), although I tried to guard against it, may have been a variable during the research. Again, experience in the usage of the DRS method will have helped.

SECTION 13:

IMPLICATIONS AND PERSONAL LEARNINGS

The research conducted for this thesis holds certain implications for myself, as an Individual Life line manager, and for the Individual Life business unit.* In addition, the "journey" taken for this thesis sheds some light on the original problem (that is, the one outlined in section 2: description of the problem situation).

Personal learnings and insights were developed during the course of the literature research. One was a theory that Phase 2 of Individual Life's quality strategy had stalled due to a lack of significant comprehension of what real and long term change was required to make it work. Crosby's quality improvement approach offered management with a visible but simplistic response to the complex task of improving the long-term effectiveness of the Individual Life business unit. Crosby's programme was tangible and therefore easy to measure. For example, statistics were kept of the number of corrective actions implemented and the number of people trained. This tangible component made it attractive to top management. Crosby provided too narrow a focus (that is, a focus on communication, training of problem solving techniques, recognition, and so on) and other areas such as leadership style, organisation structures and performance management practices were ignored. The organisation as a total system was not emphasised. Individual Life top management realised that Crosby's approach was a quick fix, a Phase 1, and that more was needed. But this profound realisation was where it ended. No real understanding of how Phase 2 would be made a reality was evident.

Another learning from the literature research was that a systemic and comprehensive approach was needed to Phase 2. This approach is embodied in the TQM philosophy and principles as set out in section 6 of this document. A vision was needed in Individual Life of how Phase 2 would be implemented. A vision of how the business unit would organise and manage for competitiveness was required. Consensus had to be fostered that the vision was 'right', competence had to be developed to enact it and cohesion had to be developed to move change along. Focus was needed on the development and promotion of change agents and leaders. Teamwork and co-ordination across divisions was required. The redesign of work, management practices and systems was essential. Change then needed to be consolidated through formal policies and structures that institutionalised revitalisation and renewal. Ongoing learning should have been demanded from all. In short, radical and pervasive change was needed to accompany Phase 2. A revolution was called for. I maintain that TQM is a revolutionary philosophy and it was not embraced in its totality. This is why Phase 2 lost impetus.

*The research was conducted using a sample (that is, the two branch managers) that can best be described as a microcosm of the Individual Life business unit. A much larger sample would have been ideal. Cognisance must be taken of this when inferences are made about the broader Individual Life area.

The theory that Phase 2 lost momentum because TQM's revolutionary philosophy was not effected, was inferred from the ethnographic research conducted with the two branch managers. Although the hypotheses could not be proved, it was clear that both had similar mental models and that these fell within the traditional/conventional management paradigm. They did not enact the TQM philosophy or model. It may be said therefore, that a gap exists between what is desired (the TQM model) and current reality (the traditional/conventional paradigm). The TQM philosophy shows how this gap can be closed. And herein lies my recommendations to top management. The first stage in managing companywide TQM is to recognise its revolutionary character. The second stage is to drive systematic changes in the organisation. Implementation of TQM provides challenges similar to those involved in the management of other revolutionary transitions.

The implications, personal learnings and convictions outlined in this project/thesis will be fed back to the two branch managers, their superiors, and to my Assistant General Manager (Individual Life: Client Services). I have also been asked to present my findings to delegates of the Business Leadership Development programme that is run by Old Mutual.

Another learning was that ethnography and ethnographic interviewing is a method and a skill that can be used to better understand cultural scenes, not only by anthropologists and researchers but by line managers in an organisation like Old Mutual. This could benefit managers who need to introduce change into their organisation, and in so doing need to understand and assess the dominant cultural themes in that organisation. In South Africa where cultural diversity is prevalent in every organisation, ethnographic interviewing skills can be used to better understand how others organise their culture. Annexure 2 provides succinct documentation of the DRS methodology that may be used by anyone wishing to follow it.

LIST OF ANNEXURES

- | | |
|--------------------|--|
| ANNEXURE 1: | Branch indices and statistics |
| ANNEXURE 2: | The ethnographic 'Developmental Research Sequence' methodology |
| ANNEXURE 3: | The taxonomic analysis and componential analysis for the two branch managers |

ANNEXURE 1

FIELD SERVICES STATISTICS

DEFINITIONS

1. Total Issues Policies Per Manmonth

This is a measure of Agent productivity. The higher the figure, the more productive the unit (intermediary, team, branch, etc.)

Total:

Both Recurring and Single Premium policies are included.

Issued:

Issued business is the total business written in the current financial year.

Policies:

A policy is counted for each new business case, as well as for any premium increase in excess of an annually determined cut-off.

Manmonths:

Total number of manmonths accumulated by the commission-earning sales staff.

2. Commission Content Persistency

This figure is a measure of the quality of business written. The higher the figure, the better the business.

Commission Content:

Total Commission payable on a policy.

Persistency:

Retained Commission Content as a percentage of Issued Commission Content. this is calculated only on Recurring business. (See below for definition of **Issued** and **Retained**.)

Issued:

Issued business is the total business written in the current financial year.

Retained:

Retained business is the Issued business, nett of any lapses and revivals of business which is in its commission paying period, i.e. which is within two years of policy inception.

3. Controllable Expenses % of Total RCC

This is a measure of viability. The lower the figure, the more viable the unit is.

Controllable Expenses:

Total Expenses excluding Production-related Expenses (e.g. commission costs)

Total RCC:

Retained Commission Content on both Recurring and Single Premium policies.

BRANCH "B"

	TOTAL ISSUED POLICIES PER MANMONTH	COMMISSION CONTENT PERSISTENCY	CONTROLLABLE EXPENSES % TOTAL RCC
JAN. '94	6.5	77.63	129
JUN. '93	5.9	80.60	132
JUN. '92	6.6	76.64	125
JUN. '91	6.7	81.81	97
JUN. '90	7.0	86.44	83
JUN. '89	5.4	89.15	73

BRANCH "A"

	TOTAL ISSUED POLICIES PER MANMONTH	COMMISSION CONTENT PERSISTENCY	CONTROLLABLE EXPENSES % TOTAL RCC
JAN. '94	7.3	81.97	72
JUN. '93	7.7	84.59	62
JUN. '92	8.3	88.33	61
JUN. '91	7.8	90.09	54
JUN. '90	8.1	92.85	56
JUN. '89	8.9	91.78	44

ANNEXURE 2:

THE ETHNOGRAPHIC 'DEVELOPMENTAL RESEARCH SEQUENCE'

- NOTE:
- This entire annexure is based on Spradley's (1979) book: The Ethnographic Interview
 - The information in the book was assimilated, synthesised and then documented using a method called Information Mapping.
 - Information Mapping is based on seven basic principles of communication. The principles ensure a reader-based, task-orientated writing style that meets the needs of both readers and writers.
 - Some of the features of Information Mapping are the use of labels for quick referencing, the use of step and action tables for procedures needing to be followed, and the grouping of information into manageable chunks.

DEVELOPMENTAL RESEARCH SEQUENCE CONTENTS

	PG
ASKING DESCRIPTIVE QUESTIONS	1
MAKING A PRELIMINARY DOMAIN SEARCH	3
MAKING A DOMAIN ANALYSIS	5
ASKING STRUCTURAL QUESTIONS	8
MAKING A TAXONOMIC ANALYSIS	11
ASKING CONTRAST QUESTIONS	14
MAKING A COMPONENTIAL ANALYSIS	19
DISCOVERING CULTURAL THEMES	22
WRITING AN ETHNOGRAPHY	28

ASKING DESCRIPTIVE QUESTIONS

PRINCIPLES TO REMEMBER

Remember the following principles and guidelines when asking descriptive questions:

- Establish rapport with informant. Trust and respect are important elements. The rapport process when developed successfully proceeds through the following stages:
 - apprehension
 - exploration
 - co-operation
 - participation
- Expanding the length of the question tends to expand the length of the response. Example: I've never attended one of your management meetings, so I don't have much of an idea what it's like. Tell me in as much detail as possible what occurs and how the meeting unfolds?
- Questions should be asked that enables the informant to tell about patterns of behaviour in a particular scene, not merely his/her own actions.

QUESTIONS TO ASK

The following questions aimed at obtaining a verbal description of significant features of a culture will be asked (depending on the situation during the interview):

- Could you describe a typical day at work?
(Typical grand tour question).
- Could you describe what happened at work yesterday from the moment you arrived until you left? (Specific grand tour question).
- Could you describe what goes on during your...?
[Insert a recurrent activity that is described by the informant when answering the aforementioned questions. Example : management meeting]
(Mini-tour question).

- Could you give me an example of ... [Insert some single act or event identified by the informant? Example : management control] (Example question).
- You've probably had some interesting experiences in ... ; can you recall any of them? [Insert an act or event identified by the informant. Example : management meetings] (Experience question).
- How would you refer to it? [Use this question when the informant uses a term. Example : discipline]. (Direct native language question).

NOTE: The above questions are phrased in personal terms, i.e. the word 'you' is used. It is important to also phrase questions culturally. Example : can you describe a typical day at work for most managers in your area.

MAKING A PRELIMINARY DOMAIN SEARCH

PRINCIPLES TO REMEMBER Remember the following principles and guidelines when making a preliminary domain analysis :

- All cultural meaning is created by using symbols. A symbol (also referred to as a folk term) is any object or event that refers to something.
- Language is the primary symbol system that encodes cultural meaning in every society. Language can be used to talk about all other encoded symbols.
- The meaning of any symbol is its relationship to other symbols in a particular culture.
- The task of ethnography is to decode cultural symbols and identify the underlying coding rules. This can be accomplished by discovering the relationships among cultural symbols. (the 'relational theory of meaning').
- In order to achieve the aforementioned when interviewing, 'don't ask for meaning, ask for use'. By listening for use, not meaning, informants will reveal relationships between one term and many others. Example :What are some sentences in which you might use the term management controls? (and not - what does management controls mean)

DEFINING DOMAIN

Any symbolic category that includes other categories is a domain. All the members of a domain share at least one feature of meaning. In the process of discovering domains the similarities that exist among folk terms are identified.

DOMAIN STRUCTURE

The basic element in a domain are:

- A cover term : these are names for a category of cultural knowledge.
- Included terms : all domains have two or more included terms. These are folk terms that

belong to the category of knowledge named by the cover term.

- A single semantic relationship : this occurs when two folk categories are linked together.
- A boundary : some folk terms belong inside the domain and others belong outside the domain. The decision as to whether a term is a member of one domain or another must always be made by native informants.

Example :

Give Waitresses Grief	⇒ Cover Term
↑ (is a way to)	⇒ Semantic Relationship
• ordering separately	⇒ Included term
• paying with large notes	⇒ Boundary

MAKING A PRELIMINARY DOMAIN SEARCH

A preliminary domain search familiarises the ethnographer with possible domains and helps one look at interview data in a different way.

Follow this procedure when making a preliminary search:

STEPS	ACTION
1	Select a sample of verbatim notes for the interview
2	Read through the interview notes and look for folk terms that name things. It is usually easiest to search for nouns that label objects. Underline these folk terms and write them on a separate sheet of paper. Note: Do not identify all names for things, but select only the names that stand out. <i>Example:</i> Tequila and lime, bartender, beer, standard drink.
3	Identify possible cover terms and included terms from the sample. Ways to identify cover terms is to ask if any folk terms are being used for more than one thing, and also look for use of folk terms in plural form.
4	Search through additional interview notes for other included terms.

MAKING A DOMAIN ANALYSIS

PRINCIPLES TO REMEMBER

Remember these principles and guidelines when making a domain analysis:

- Domain analysis begins by using semantic relationships rather than cover terms (as described in the previous step) to discover domains.
- It was mentioned previously that we use folk terms to convey meaning to others when we talk. Most of the time we do not merely utter an isolated folk term. Rather, we carefully select two or more and place them in a well-planned relationship to each other, i.e. a semantic relationship.
- Semantic relationships provide the ethnographer with one of the best clues to the structure of meaning in another culture. They lead directly to the larger categories (folk domains) that reveal the organisation of cultural knowledge learned by informants.
- From a growing body of research, it appears that the number of semantic relationships in any culture is quite small, perhaps less than two dozen. In addition, certain semantic relationships appear to be universal.

TWO TYPES

Semantic relationships can be divided into two types : universal- and informant-expressed.

- The following universal semantic relationships are the most useful for an analysis of semantic domains.

Semantic Relationships	FORM
i) Strict inclusion**	X is a kind of Y
ii) Spatial	X is a place in Y, X is a part of Y
iii) Cause-effect	X is a result of Y, X is a cause of Y
iv) Rationale	X is a reason for doing Y
v) Location for action	X is a place for doing Y
vi) Function	X is used for Y
vii) Means-end**	X is a way to do Y
viii) Sequence	X is a step (stage) in Y
ix) Attribution	X is an attribute (characteristic of Y)

** Use these when making a start in domain-analysis.

- Informant-expressed semantic relations must be used when it is not easy to identify one or another universal semantic relationship in what an informant says. Example : a tramp-informant might say, "you can make the Sally". This relationship can be stated as "X (is something done by) Y", i.e. Making the Sally (is something done by) tramps. One may therefore hypothesise that tramps had customary things they did, one of which was to "make the Sally".

PROCEDURE IN DOMAIN ANALYSIS

The following steps represents a tool for identifying folk domains.

Follow this procedure when making a domain analysis:

Step	Action
1	Select a single semantic relationship. Begin with a universal semantic relationship, then move to the use of informant-expressed semantic relationships.
2	Prepare a domain analysis worksheet. (see next page). Enter certain information before beginning: (i) the semantic relationship selected; (ii) a statement of the form in which it is expressed and (iii) an example from one's own culture of a sentence that has an included term (iv), the semantic relationship and a cover term.
3	Select a sample of verbatim informant statements. To begin with, one need only select a few paragraphs from transcribed interviews or notes taken during an interview.
4	Search for possible cover terms and included terms that appropriately fit the semantic relationship. Search for actions or things people do. Later, in componential analysis, other information (i.t.o. who, where, when and why) will become important. <u>Note</u> : Do not read for the meaning of sentences and for the content of what was said. Read with an eye for folk terms which might fit the semantic relationship. Read with a question in mind : "Which terms could be a kind of something? Could there be different kinds of those?"
5	Formulate structural questions for each domain. Structural questions enable one to elicit from an informant such items as cover terms and included terms. Also they help to discover the boundary of a folk domain and structural questions tests the ethnographic hypotheses that have emerged domain analysis. The next phase will describe the types of structural questions.
6	Repeat the aforementioned steps to expand the list of domains.
7	Make a list of all hypothesised domains in order to gain an overview of the cultural scene and to select domains

DOMAIN ANALYSIS WORKSHEET

1. Semantic Relationship :

2. Form :

3. Example :

Included Terms	Semantic Relationship	Cover Term
-----	----- }	
-----	----- }	
-----	----- }	
-----	----- }	
-----	----- }	
-----	----- }	

Structural Questions :

Included Terms	Semantic Relationship	Cover Term
-----	----- }	
-----	----- }	
-----	----- }	
-----	----- }	
-----	----- }	
-----	----- }	

Structural Questions :

ASKING STRUCTURAL QUESTIONS

PRINCIPLES

The following principles will serve as guides for using structural questions:

- **Concurrent principle** : Ask structural questions can concurrently with descriptive questions. Although the Developmental Research Sequence goes from descriptive questions to structural questions to contrast questions, the ethnographer never proceeds from descriptive to structural to contrast interviews, i.e. it is best to alternate various types of questions in each interview.
- **Explanation principle** : Structural questions often require an explanation. The ethnographer can do this by prefacing structural questions with a reminder like "I'm interested in the way you and other ballet dancers refer to exercises, what would you call them in class?"

Always ask a structural question by repeating at least some of the included terms already uncovered. Example : "I'm interested in knowing all the different ways the deaf use to communicate. You mentioned ASL, signed English, speaking and writing. Can you think of any other ways?" By listing several known included terms in this manner, most informants immediately recall additional terms.

- **Repetition principle** : Structural questions must be repeated many times to elicit all the included terms of a folk domain.
- **Context principle** : When asking structural questions, provide the informant with contextual information. This places the informant in the setting where the domain is relevant. It also aids greatly in recall and will avoid the problem of making an informant feel he is being tested with a series of short questions.

- Cultural framework principle : The ethnographer must phrase structural questions in cultural as well as personal terms. It is often easiest for an informant to begin responding to questions about his or her own personal experience. "What are the kinds of masquerade wear that you have rented to customers?" But before exhausting the information known to an informant, it is important to rephrase questions in cultural terms. "What are all the kinds of masquerade wear a person could possibly rent at the store?"

KINDS OF STRUCTURAL QUESTIONS

There are five major types of structural questions and several subtypes. They provide alternative ways to verify the existence of a folk domain or to elicit folk terms included in a folk domain.

- 1) Verification questions : These questions ask an informant to confirm or disconfirm hypotheses about a folk domain.

Types :

- Domain verification questions : These questions seek to verify the existence of a domain for which one has hypothesised a cover term. They take the form : "Are there different kinds of Y's?" (Y is a cover term).
- Included term verification questions : They seek to verify whether one or more terms are included in a domain. They take the form : "Is X a kind of flop?" or "Is X a way to hassle waitresses?"
- Semantic relationship verification questions : It is often necessary to test the appropriateness of the way a semantic relation (as hypothesised by the ethnographer) is expressed. Example : "Would tramps ever say, a hotel lobby is a kind of flop?"
- Native language verification questions : These questions negate the tendency to translate. It is therefore necessary to continually verify whether a particular term is a folk term rather than the ethnographer's translation. Form : "Is this a term you would use?" or "Would most

tramps usually say when talking with other tramps"?

- 2) Cover term questions : This type of structural question is the one most frequently used. It can be asked whenever one has a cover term. Examples : Kind of bulls - "Are there different kinds of bulls?" and ways to get tips - "Are there different ways to get tips?" If the answer is yes, continue asking, "could you tell me what some of them are?"
- 3) Included term questions : Every folk domain has two or more included terms. Sometimes these surface before you've discovered the cover term for the domain (if it exists). Example : a clerk at the costume shop might say, "I rented many things today - Peter Pan, Robin Hood, Raggedy Andy and a bunch of others". Ask, "are Peter Pan, Robin Hood and Raggedy Andy all the same kind of thing?" The informant might say : "Yes, they're all kinds of miscellaneous character costumes". Then ask, "are there any other kinds of miscellaneous character costumes?"
- 4) Substitution frame questions : These questions are constituted from a normal statement used by an informant. One term is removed from the sentence and an informant is asked to substitute other meaningful terms. Example :
 - Original statement : You find bulls in the bucket
 - Substitution frame : You find _____ in the bucket
 - Substitution frame question : Can you think of any other terms that might go in that sentence?
 - Response : You find drunks in the bucket.

Write down the statement and the substitution frame as this makes it easy for an informant to fill in the blank with appropriate terms.

- 5) Card sorting structure : Writing folk terms on cards helps to elicit, verify and discuss a domain. Write cover terms on a card of one colour, included terms on cards of another

colour. As new included terms are discovered during an interview, they can be written on a separate card and placed beneath the cover term.

MAKING A TAXONOMIC ANALYSIS

SELECTING A TENTATIVE FOCUS

A complete and exhaustive ethnography, even for a rather limited cultural scene, would take years of intensive research. This means that only some aspects of a culture can be studied more exhaustively than others. Most ethnographers study a few selected domains in depth, while still attempting to gain a surface understanding of a culture as a whole. The Development Research Sequence (DRS) begins with a wide focus, then with the 'asking structural questions' phase, begins to narrow for intensive investigation of a few selected domains. The DRS also implies that both a narrow and wide focus occur simultaneously. Interviews must range widely over many topics; they must also go deeply into particular topics. In selecting domains for in-depth analysis, the choice of focus must be tentative. New domains that are more important often emerge along the way and lead to a shift in the focus of research.

CRITERIA FOR TENTATIVELY SELECTING DOMAINS

Several criteria may be considered:

- Informant's suggestions : Sometimes informants will spontaneously say, "If you really want to understand Brady's Bar you should study the problems waitresses have with bartenders". One might also ask informants directly : "There are so many things to find out about; which do you feel would be the most important for me to concentrate on in the time we have left?" Another way would be to write the names of most domains on separate cards. Ask, "Of these, which do you think is the most important for understanding what its like to be a manager in this organisation?"

- Theoretical interest : One may want to select domains that relate to the topic or area one is researching.
- Organising domains : Sometimes one will discover a large domain that seems to organise most of the cultural knowledge the informant has learned. Somehow, it pulls together the relationships of many other domains.

FOLK TAXONOMIES

Like a domain, a folk taxonomy is a set of categories organised on the basis of a single semantic relationship. A taxonomy differs from a domain in only one respect : it shows the relationships among all the folk terms in a domain. The relationships are usually charted and reveal that different levels exist in folk taxonomies.

PROCEDURE

Follow this procedure when making a taxonomic analysis:

STEP	ACTION
1	Select a domain for taxonomic analysis. Begin with the domain for which you have the most information.
2	Identify the appropriate substitution frame for analysis. It is important to keep in mind that a domain and the taxonomy associated with it are always based on a single semantic relationship. Example : <ul style="list-style-type: none"> - Domain : kind of inmates - Semantic relationship : a <u>drunk</u> (is a kind of) <u>inmate</u> - Underlying semantic relationship : _____ (is a kind of) _____ - Substitution frame : _____ (is a kind of) _____
3	Search for possible subsets among the included terms. Use the substitution frame and check to see if any of the included terms fit the blank spaces of this relationship. Add to the list by reviewing field notes and past interviews.
4	Search for larger, more inclusive domains that might include as a subset the one you're analysing. This may be done by reviewing interview data and asking questions such as : "What are all the different kinds of _____". Once your informant replies with a list of folk terms, search for larger domains by asking : "Is a _____ a kind of something?"
5	Construct a tentative taxonomy. A taxonomy can be represented in 3 ways : a box diagram, a set of lines and nodes, or an outline. Example of lines and nodes diagram : COVER TERM
6	Formulate structural questions to verify taxonomic relationships and elicit new terms. This is often facilitated by asking card sorting structural questions. Informants can then sort the cards into sets based on all being the same kind of (say, person).
7	Conduct additional structural interviews. Check the analysis and tentative taxonomy with informants. Rather than show informants the tentative taxonomy or a diagram or any kind, ask them to instruct you on how they <u>use</u> their folk terms. Example : "Is it appropriate to say 'a trusty is a kind of inmate?'".
8	Construct a completed taxonomy. <u>Note</u> : Taxonomies always approximate the way informants have organised their cultural knowledge. They're not exact replicas of that knowledge.

ASKING CONTRAST QUESTIONS

PRINCIPLES

A summary of previously discussed discovery principles follows :

DISCOVERY PRINCIPLE	THE MEANING OF A SYMBOL CAN BE DISCOVERED BY ...
Relational principle	Finding out how it is related to all other symbols
Use principle	Asking how it is used rather than asking what it means
Similarity principle	Finding out how it is similar to other symbols. (Place folk terms and domains side by side and ask, "Is there any way these appear similar?")

Another principle as yet not discussed is the contrast principle. Every domain has a boundary : When we discover that some folk terms belong inside that boundary because of similarity, we also discover others belong outside because of differences. The contrast principle therefore states that the meaning of a symbol can be discovered by finding out how it is different from other symbols. It is based on the fact that the meaning of any folk term depends on what it does not mean.

UNRESTRICTED AND RESTRICTED CONTRAST

Two kinds of semantic contrast are distinguishable :

- 1) Unrestricted contrast : refers to a particular folk term that contrasts with all other folk terms in the language. Example : boy contrasts with girl, house and chimpanzee - little similarity exists between them.
- 2) Restricted contrast : means that a folk term belongs to a set of terms which are both alike and different - the contrast is restricted to a limited amount of semantic information. Example : although boy, girl, woman, man, adult and young man are all different, they all share some important similarities.

Contrast sets therefore operate in the background of human communication. These groups of symbols enable us to interpret instantly the meaning of our culture. In order to uncover the meaning of a symbol, one must

find out how it is different from the other terms in some contrast set.

Each domain of a culture consists of folk terms in restricted contrast. There are two ways to search for differences among folk terms in restricted contrast :

- i) Review all field notes looking for informants' statements which suggest differences.
- ii) Ask contrast questions.

KINDS OF CONTRAST QUESTIONS

There are seven different types:

- 1) Contrast verification questions : It is formulated after discovering some difference between two folk terms. This difference is presented to an informant with a request to confirm/disconfirm the difference. They frequently confirm differences and similarities among a large group of folk terms.

Example : In studying the meaning of 'flop' with tramp informants, one important difference that emerged was whether you could lie down in a particular flop or whether you had to sit up and sleep. The informant was presented with two stacks of cards on which the names of various flops occurred. The cards were tentatively divided into two stacks and the informants were asked : "Can you tell me if all these flops are places you can lie down?"

- 2) Directed contrast questions : It begins with a known characteristic of one folk term in a contrast set and asks if any other terms contrast on that characteristic.

Example : If an informant points out that a 'nose-dive' is required in a particular mission flop, without even knowing anything about nose-dives, one can ask : "Could you look through all the other mission flops (referring to the cards) and tell me which ones require you to take a nose-dive in order to get a flop and which ones do not?"

- 3) Dyadic contrast questions : These questions, as well as all the remaining ones, differ in an important way from (1) and (2). They are asked without having any differences to suggest to the informant. One asks the informant to identify any difference they can see between folk terms. Informants are then free to reveal contrasts that are meaningful to them, some that the investigator would not think of.

Example : "What are the differences between a flyboy and a turnkey?"

- 4) Triadic contrast questions : This type of question present an informant with three folk terms and asks, "Which two of these are alike and which one is different from the others?" This procedure recognises that differences always implies similarities. It is one of the most effective types of contrast questions.

Example : "Here are three kinds of tramps, a bindle stiff, an airdale and a home guard tramp. Which two of these are alike and which one is different?" With both (3) and (4) type questions one can follow up each response with a (2) question.

- 5) Contrast set sorting questions : These questions make use of all the terms in a contrast set at the same time. One writes each folk term on a card ahead of time. The cards are presented to the informant with a simple instruction : "Would you sort these into two or more piles in terms of how they are alike or different?"
- 6) Twenty questions game : The main rule underlying this game is that the person asking questions must only ask questions that can be answered yes or no. Select a single contrast set and pick one folk term from that. The informant is told which contrast set the folk term comes from, but not the folk term itself. The informant must ask yes and no questions of the ethnographer until the informant can guess which term the ethnographer is thinking of.

- 7) Rating questions : These questions seek to discover the values placed on sets of symbols. They ask informants to make contrasts on the basis of which folk terms are best, easiest, most difficult, worst, most interesting, most desirable, most undesirable, or any other rating criteria. Many times a rating question must be asked in the form of a directed contrast question which gives the informant one contrast, then asks for others. The ethnographer must be alert to folk terms that refer to rating scales.

Example : Tramps refer to one or another trusty job as "shitty", "soft job" and "worse than lockup". These terms became the basis for asking them to rate all the trusty jobs : "Place them in rank order from the least soft to the most soft".

ADDITIONAL GUIDELINES The following are additional guidelines for asking contrast questions :

- Use cards as often as possible when asking any kind of contrast question. One of their greatest values lies in the fact that they enable the informant to sit and think about differences while keeping in mind many different folk terms. Cards can be grouped quickly into two's and three's on the basis of contrasting characteristics, then regrouped again.
- A fundamental rule in using all contrast questions is to ask for contrasts among members of the same contrast set i.e. folk terms should be drawn from the same contrast set.

Examples : Kinds of decision, kinds of flops, kinds of customers.

- Sometimes contrast questions elicit what is called "test question response". In response to a question, informants sometimes answer with a test question response : "What do you mean alike or different?" or "What kind of difference do you want"? Avoid responding by rephrasing the question in such a

way that might impose the ethnographer's interests onto the informant. Place the responsibility for making contrasts in the hands of the informant.

Examples of how to respond : "Well, I mean alike or different in any way that you can think of" or "I'd like to know any differences that you think are important to most tramps".

MAKING A COMPONENTIAL ANALYSIS

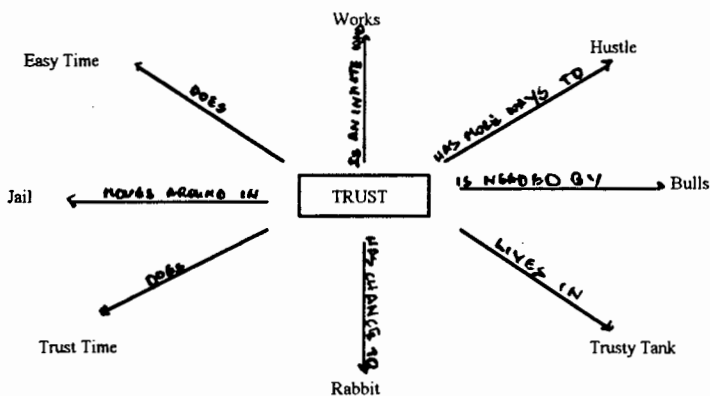
DEFINITION

Componential analysis is the systematic search for the attributes (components of meaning) associated with cultural symbols. Whenever an ethnographer discovers contrasts among the members of a category, these contrasts are best thought of as the attributes or components of meaning for any term.

Example : a 'ranger' and a 'runner' are both kinds of trusties. Up to now the emphasis has been on their similarity : they are both related by being included in the set i.e. kinds of trusties. But when these folk terms are contrasted, one discovers that a ranger is a trusty who leaves the jail each day; a runner, on the other hand, remains within the jail until released. Each fact (leaves the jail, remains in the jail) is a component of meaning for the respective folk terms. Therefore, an attribute can be defined as any element of information that is regularly associated with a symbol (the ranger has the attribute of leaving the jail).

ATTRIBUTES AND SEMANTIC RELATIONSHIPS

Attributes are always related to folk terms by additional semantic relationships. In making a componential analysis one will focus on multiple relationships (whereas previously one isolated a single semantic relationship). A componential analysis will lead to specific ways to represent this extra information. The following diagram shows a single folk term with some of its attributes that are related to the terms by a semantic relationship :



PARADIGM

Asking contrast questions elicits numerous attributes for many different folk terms. It is useful to represent graphically the most important attributes for any set of folk terms. This can be done with a paradigm. A paradigm is a schematic representation of the attributes which distinguish the members of a contrast set. It shows multiple semantic relationships. This is an empty paradigm :

DIMENSIONS OF CONTRAST

CONTRAST SET

	<u>1</u>	<u>2</u>	<u>3</u>
Folk term A	Attribute A1	Attribute A2	Attribute A3
Folk term B	Attribute B1	Attribute B2	Attribute B3
Folk term C	Attribute C1	Attribute C2	Attribute C3

The dimensions of contrast are given numbers in this empty paradigm, but in an actual case will be named or referred to by a descriptive phrase.

PROCEDURE

Follow this procedure when making a componential analysis :

STEP	ACTION
1	Select a contrast set for analysis. Example : The contrast set 'kinds of trusties' to help illuminate the meaning of trusty and will be used in this procedure to illustrate the steps in making a componential analysis. The purpose is to find out the meaning of all the folk terms included in the term trusty.
2	Inventory all contrasts previously discovered. Any statement about any member of the contrast set can be used. Write them down on separate sheet of paper, thus compiling a list of contrasts. Examples : A ranger is different from a blue room man because the ranger is outside; a harbour patrol man cleans up boats, but the garage man cleans up cars.
3	Prepare a paradigm worksheet. Use a large worksheet (large enough to write a number of words and short phrases) and enter the folk terms in the left-hand column labelled "contrast set"

Procedure continued on next page

4	<p>Identify dimensions of contrast which have binary values. A dimension of contrast is an idea or concept that has at least two parts (two values).</p> <p>Examples of contrast statements with binary values :</p> <ul style="list-style-type: none"> a hospital orderly is different from the blue room man and the Georgetown man because he works with the nurse. (Works with nurse : yes, no). a harbour patrol man cleans up boats. (Cleans up boats : yes, no) 				
5	<p>Enter the values of folk terms on the paradigm worksheet.</p> <p>Example :</p>				
CONTRAST	Works with boats	Works with cars	Works outside jail	Must always eat jail food	etc.
Ranger	No	No	Yes	Yes	
Odlin's man	No		Yes	Yes	
Garage man	No	Yes	Yes	Yes	
Georgetown man	No		Yes	Yes	
City Hall man	No		Yes	Yes	
Harbour patrol man	Yes	No	Yes	No	
Wallingford man	No		Yes	No	
Floor man	No	No	No	Yes	
Clerk	No	No	No	Yes	
Bull Cook	No	No	No	Yes	
Court Usher	No	No	No	Yes	
Runner	No		No	Yes	
Barber	No	No	No	Yes	
6	<p>Combine closely related dimension of contrast into ones that have multiple values. This allows for the formulation of questions that can be asked.</p> <p>Example : The first two dimensions of contrast (works with boats; works with cars) can be combined into a more general one - "What do they work with?" This combining operation raises another question : "What do other trusties work with?" The informants must then be asked this question.</p>				
7	<p>Prepare contrast questions to elicit missing attributes and new dimensions of contrast. The paradigm worksheet will reveal the kinds of information needed from informants.</p>				
8	<p>Conduct an interview to elicit needed data. New domains will also present themselves, which should be explored.</p>				
9	<p>Prepare a completed paradigm. Sometimes a single contrast set is best analysed with two or more paradigms. It might also be necessary to use numbers in each attribute space, rather than writing out a verbal description of the attribute.</p>				

DISCOVERING CULTURAL THEMES

DEFINITION

For the purposes of ethnographic research, cultural theme(s) may be defined as any cognitive principle, tacit or explicit, recurrent in a number of domains and serving as a relationship among subsystems of cultural meaning.

Each of the abovementioned concepts will be examined in greater detail.

COGNITIVE PRINCIPLE

Cultural themes are elements in the cognitive maps which make up a culture. These are larger units of thought. They consist of a number of symbols lined into meaningful relationships. A cognitive principle will usually take the form of an assertion such as "men are superior to women" or "you can't beat a drunk charge". A cognitive principle is something that people believe, accept as true and valid; it is a common assumption about the nature of their experience.

Themes are assertions that have a high degree of generality. They apply to numerous situations. They recur in two or more domains. It is likely that a culture will be integrated around a set of major themes and minor themes.

TACIT OR EXPLICIT

Cultural themes sometimes appear as folk sayings, mottos, proverbs or recurrent expressions. One ethnographer studied a Japanese bank which had the official motto "Harmony and Strength". This motto summed up a recurrent theme in the social structure and ritual activities of bank employees. Such explicit expressions sometimes provide clues which enable the ethnographer to formulate the cultural theme.

However, most themes remain at the tacit level of knowledge. People do not express them easily, even though they know the cultural principle and use it to organise their behaviour and interpret experience. Themes come to be taken for granted; they slip into that area of knowledge where people are not quite aware or seldom find the need to express what they know. This means that the ethnographer will have to make inferences about the principles that exist.

THEMES AS RELATIONSHIPS

Themes not only recur again and again throughout different parts of a culture, they also connect different subsystems of a culture. They serve as a general semantic relationship among domains.

STRATEGIES FOR MAKING A THEME ANALYSIS

A number of strategies exist for making a theme analysis : immersion, making a cultural inventory, making a componential analysis of folk domains, searching for similarities among dimensions of contrast, identifying organising domains, making a schematic diagram of the cultural scene and searching for universal themes. Each of these strategies will be discussed in greater depth.

IMMERSION

One of the techniques for making a theme analysis is immersion. It is a time-honoured one used by most ethnographers. By cutting oneself off from other interests and concerns, by listening to informants hours on end, by participating in the cultural scene and by allowing one's mental life to be taken over by the new culture, themes often emerge. Sometimes immersion, broken by brief periods of withdrawal, generates insights into the themes of a culture.

MAKE A CULTURAL INVENTORY

At some point in one's research it might be necessary to make a careful, written inventory of all the data one has collected. Here are a number of specific ways to inventory the data.

Procedure in making an inventory :

STEP	ACTION
1	Make a list of cultural domains. Here one can continue to add to the list prepared in previous phases. One may need to reread all ethnographic interviews to search for domains that may have been overlooked. List the cover term at the top of a card in large print. Then below this, in small print, list the included terms. (If the domain has a large number of included terms, only list the included terms at the first level. Indicate in the upper right-hand corner of each card the degree to which each domain has been analysed, i.e. completely analysed taxonomy paradigm; complete taxonomy and partial paradigm; cover term and all included terms but no taxonomy or paradigm; cover term only (or with a few included terms))

Procedure continued on next page

2	<p>Make a list of possible unidentified domains. One's familiarity with the cultural scene will improve to the point where one can imagine possible domains one's informant has never discussed. Formulate some general structural questions as an aid to thinking up possible unidentified domains :</p> <ul style="list-style-type: none"> * Are there any other kinds of events? * Are there any other kinds of objects? * Are there any other kinds of acts? * Are there any other kinds of actors? * Are there any other kinds of activities? * Are there any other ways of to achieve things? * Are there any other ways of to avoid things? * Are there any other ways of to do things? * Are there any other causes of behaviour? * Are there any other effects of behaviour? * Are there any other reasons for doing things? * Are there any other things that are use for something? * Are there any other stages in tasks/activities/events? * Are there any other objects that have parts? * Are there any other places that have parts? <p>As the list of possible, unidentified domains are compiled, entertain ideas about relationships between these unidentified domains and the ones analysed. Enter any tentative ideas about themes in the notes immediately and these can be tested and evaluated later.</p>
3	<p>Collect sketch maps. Go through the field notes and make a copy of all sketch maps made by one's informants - this is made possible by asking task-related descriptive questions. Informants often provide the ethnographer with sketch maps of activities or events as well as places.</p> <p>Example : a ceremony that goes through stages, a network of friends, routes taken from one place to another, insides of rooms, etc.</p> <p>Before going on to the next inventory task, make a short list of additional sketch maps one could obtain from informants. Note the ones that would help in completing an ethnography so that they can be collected during the next interview.</p>
4	<p>Make a list of examples. An example is a verbal description of a concrete experience. It always gives details, specific facts of the situation. In the final written ethnography, illustrate the folk terms (the skeletons of a culture's structure) with examples (the flesh of these skeletons). To make a list of examples, take the cards on which one listed domains and record the pages in the field notes which contain examples. Skim through the field notes and make an estimate of gaps in the data. If short on examples for domains, collect them in the next interview.</p>
5	<p>Inventory miscellaneous data. In addition to interviews one will undoubtedly have additional data. These includes one's journal, ideas that have gone into one's analysis and interpretation of field notes, and anything else collected. Don't overlook pictures, magazines or artefacts related to the cultural scene under study. Make a list of all miscellaneous data so that by the end of the inventory, an index exists to the cultural material collected.</p>

COMPONENTIAL ANALYSIS OF FOLK DOMAINS

After making an inventory, one has the basis for doing a analysis using all the cover terms as a contrast set. This macro-domain can be referred to as 'things informants know'. Formulate a large paradigm worksheet with all domains listed down the left hand column and begin searching for contrasts.

SIMILARITIES AMONG DIMENSIONS OF CONTRAST

Another strategy for discovering cultural themes is to examine the dimensions of contrast for all the domains analysed in detail. The dimensions of contrast represent a somewhat more general concept than the individual attributes associated with a folk term. Themes are more general still, but dimensions of contrast can sometimes serve as a bridge between the most specific terms and their attributes and the themes that relate to subsystems of cultural knowledge.

IDENTIFY ORGANISING DOMAINS

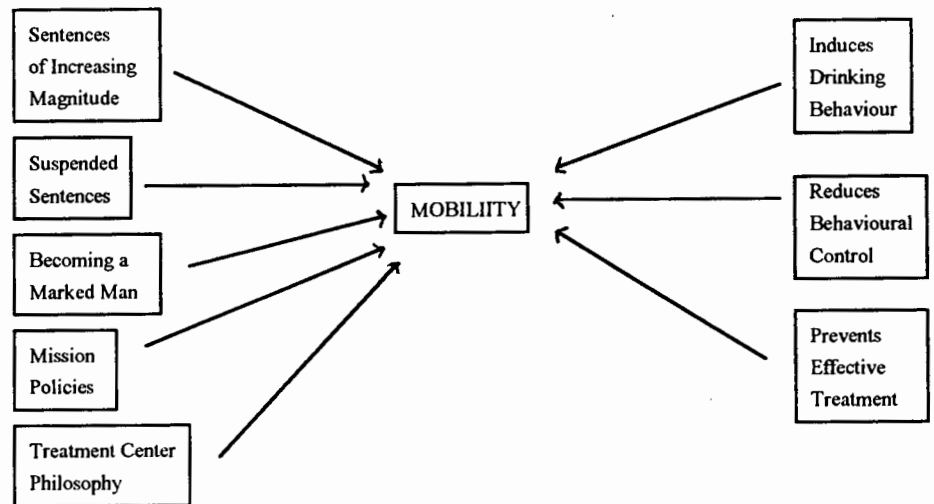
Some domains in a cultural scene dynamically organise a great deal of information. This is particularly true of those based on the semantic relationship X is a stage of Y. One of the most useful strategies for discovering cultural themes is to select an organising domain for intensive analysis. One of the best kinds of organising domains are events or a series of related events.

Example : the domain 'stages in a bucket' is a major organising domain which may be used as a central focus of the ethnographer. Always link other domains to an organising domain in developing cultural themes.

SCHEMATIC DIAGRAM

Another strategy for discovering cultural themes is to try and visualise relationships among domains. One can begin making schematic diagrams by selecting a limited number of domains and themes.

Example : the following figure shows some of the relationships that occur between the theme of mobility in tramp culture and various aspects of their lives :



The final diagram created is not nearly as important as the process of visualising the parts of a cultural scene and their relationships. This thinking process is one of the best strategies for discovering cultural themes. Incorporate the diagram into the final ethnographic description as it helps make the relationships in a cultural scene clear to those who read the report.

UNIVERSAL THEMES

In the same way that there appears to be universal semantic relationships, there appear to be some universal cultural themes, the larger relationships among domains. The following list is a tentative, partial inventory of some universal themes one might identify :

THEME	DESCRIPTION
Social conflict	In every social situation conflicts arise among people; these conflicts often become worked into cultural themes in ways that organise cultural meaning systems.
Cultural contradictions	Cultural knowledge is never consistent in every detail. Most cultures contain contradictory assertions, beliefs and ideas. One contradiction that is often found has to do with the official "image" that people seek to project of themselves, and the "insider's view" of what really goes on.
Informal techniques of social control	Every society must get people to conform to the values and norms that make social life possible. By examining the various domains to find relationships to the need for social control, one may discover important cultural themes.
Managing impersonal social relationships	In many urban settings, impersonal social relationships make up a major part of all human contact and people have developed strategies for dealing with people they do not know.
Acquiring and maintaining status	People often strive to achieve and maintain status and prestige symbols. Appearing "cool" under pressure may give one status; expressing a high degree of religious devotion confers status in some scenes.

**OVERVIEW FOR THE
CULTURAL SCENE**

This strategy for discovering cultural themes will help to pull together the major outlines of the scene under study. In several brief pages, write an overview of the cultural scene for someone who knows nothing about what is being studied. Include as many of the major domains as is possible, as well as any identified cultural themes. The goal of this overview is to condense everything one knows down to the bare essentials. In the process, one is forced to turn from the specific details and deal primarily with the larger parts of the culture; this in turn, will focus attention on the relationships among the parts of the culture and lead to discovering cultural themes.

WRITING AN ETHNOGRAPHY

TRANSLATION

Translation includes the entire process of discovering the meanings of one culture and communicating these meanings to people in another culture.

One must enter the cultural scene one hopes to understand by getting inside the language and thinking of informants. The task of a ethnographic translation is also to communicate the cultural meanings discovered to readers who are unfamiliar with that culture or cultural scene.

LEVELS OF ETHNOGRAPHIC WRITING

In writing an ethnography as a translation, the concern with the general is incidental to an understanding of the particular. In order for a reader to see the lives of the people under study as they see themselves, one must show them through particulars, not merely talk about them in generalities. There are six different levels in ethnographic writing as one moves from the general to the particular :

- Level One : Universal statements : These include all statements about human beings, their behaviour, culture, or environment situation. They are all-encompassing statements. Example : a study of clerks who record burglaries in the police department might assert the following universal statement : "In all human societies, some people keep records of one sort or another about their affairs".
- Level Two : Cross-cultural descriptive statements : These are statements about two or more societies. They consist of assertions that are true for some societies, but not necessarily true for all societies. They help place a cultural scene in the broader picture of human cultures. By means of contrast one can convey an important dimension of the culture. Example : In the study of Brady's Bar this statement was made, "when anthropologists began studying small, non-western societies they found that people participated in a single web of life ... when we turn to complex societies such as our own, the number of cultural perspectives for any situation increases radically".

- Level Three : General statements about a society or cultural group : This kind of statement appears to be specific, but in fact remains quite general. Example : "The Pygmies live in the forest and play musical instruments"; "American culture is based on the value of materialism"; "Air traffic controllers work under great stress".
- Level Four : General statements about a specific cultural scene : Most ethnographies are filled with statements at this level. Interviews provide many such statements. They are descriptive statements about a particular group. But even though they refer to a specific scene or group, they are still general in nature. Sometimes one can encapsulate general statements at level four in a quotation from an informant. Example : "The Fort Rupert Kwakiutl engage in seine fishing"; "The waitresses at Brady's get hassled by customers"; "Tramps aren't really tramps unless they make the bucket".
- Level Five : Specific statements about a cultural domain : At this level, folk terms and the specific contrasts elicited from informants are used, i.e. a class of events, objects or activities as labelled by informants. Descriptive statements at this level can make reference to taxonomies and paradigms that encapsulate a great deal of information. However, these representations in themselves seldom communicate more than a skeleton of the relationships. In order to translate these into a description that will be understood, a great deal of narrative description is required. Example : of a specific statement about the domain "asking for a drink", which makes up part of the culture of cocktail waitresses : "One frequent way that men ask for a drink is not to ask for a drink at all. In the situation where it is appropriate to ask for a drink, they ask instead for the waitress. This may be done in the form of teasing, hustling, hassling or some other speech act".
- Level Six : Specific incident statements : In one sense, levels one through five contrast sharply with level six. This level goes to the actual level of behaviour and objects, to the level of perceiving these things. As a reader, one immediately begins to see things happening, perhaps feel things that the actors in a situation feel. A good ethnographic translation shows; a poor one only tells. Example : from Brady's Bar : "Sandy is working the upper section on Friday night. She walks up to the corner table where there is a group of five she has never seen before. She steps up to the table and asks, "Are you ready to order now?" One of the males grabs her by the waist and jerks her towards him. "I already know what I want! I'll take you", he says as he smiles innocently up at her.

NOTE : Effective writing is achieved by using all levels, but in a certain proportion. Use the middle level of generalisations sparingly. Emphasise the most general and the most specific. The concern with the general is incidental to an understanding of the particular, because generalities are best communicated through particulars.

PROCEDURE

Follow these steps in writing an ethnography.

STEP	ACTION										
1	Select an audience, identify it clearly, and then keep in mind throughout the writing who the audience is.										
2	<p>Select a thesis (i.e. the central message, the point one wants to make) and state it briefly. Organise and integrate one's information around this single major idea.</p> <p>Sources for finding a thesis :</p> <table> <tr> <td>Major themes discovered in the research</td><td>A major theme in the culture of tramps was that being in jail affected one's identity</td></tr> <tr> <td>Overall goals of ethnography</td><td>A thesis may be to show that to a cocktail waitress a bar is more complex than an outsider would think, i.e. cultural meaning systems are more complex than is thought.</td></tr> <tr> <td>Recipes for behaviour</td><td>Another way to formulate a thesis is in terms of a set of recipes for behaviour. Culture can be viewed as a set of instructions for carrying out ordinary activities for life (the recipe for being a tramp or how to ask for a drink).</td></tr> <tr> <td>Tacit rules for behaviour</td><td>This thesis argues that much goes on in social life that we do not see. The purpose might be to make these tacit rules explicit.</td></tr> <tr> <td>Literature of social sciences</td><td>One may for instance review the literature on the concept of "reciprocity". One may then say formulate a thesis that links the patterns of reciprocity among tramps to these more general concepts.</td></tr> </table>	Major themes discovered in the research	A major theme in the culture of tramps was that being in jail affected one's identity	Overall goals of ethnography	A thesis may be to show that to a cocktail waitress a bar is more complex than an outsider would think, i.e. cultural meaning systems are more complex than is thought.	Recipes for behaviour	Another way to formulate a thesis is in terms of a set of recipes for behaviour. Culture can be viewed as a set of instructions for carrying out ordinary activities for life (the recipe for being a tramp or how to ask for a drink).	Tacit rules for behaviour	This thesis argues that much goes on in social life that we do not see. The purpose might be to make these tacit rules explicit.	Literature of social sciences	One may for instance review the literature on the concept of "reciprocity". One may then say formulate a thesis that links the patterns of reciprocity among tramps to these more general concepts.
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Literature of social sciences	One may for instance review the literature on the concept of "reciprocity". One may then say formulate a thesis that links the patterns of reciprocity among tramps to these more general concepts.										
3	Make a list of topics (sections) and create an outline by reviewing field notes and the cultural inventory. Any ethnography will necessarily deal with only selected aspects of a culture and one will use only part of the material collected.										
4	Write a rough draft of each section. Avoid the desire to revise each sentence as it goes down on paper. Because constant revision seldom occurs in speaking, a good rule is to write as one talks when composing a rough draft of each section.										
5	Revise the outline and create subheadings. Once a rough draft is completed for each section, make a new outline, rearranging sections as appropriate. Native folk terms can be used as subheadings, helping create a view which reflects the cultural knowledge of one's informants.										
6	Edit the rough draft. Go over the paper and improve the details of writing.										
7	Write the introduction and conclusion.										
8	Reread the paper for examples. Look for places where general statements have made the writing too "dense" and see if an example can be inserted.										
9	Write the final draft.										

ANNEXURE 3:

The taxonomic analysis and componential analysis for the two branch managers.

- NOTE:
- The information contained in annexure 3 provided the basis for the cultural inferences made about the two branches.
 - The information elicited during the interviews with the branch managers is structured and analysed using the taxonomic analysis and componential analysis steps in the DRS.

TAXONOMIC ANALYSIS: BRANCH MANAGER A

Cover Term: Thing(s) done by the branch manager

- | | | | | |
|----|-----------------------------------|---|--|---|
| A: | Walkabout
(PRO) | ① | Receive feedback on policy(ies) sold | |
| | | ② | Ask about family | |
| | | ③ | Visit perm | |
| | | ④ | Discuss plans | |
| | | ⑤ | Test drive | |
| | | ⑥ | Give advise | |
| | | ⑦ | Conduct role-play | |
| | | ⑧ | Discuss career(s) | |
| | | | | |
| B: | Motivate | ① | Bring in guest speakers | |
| | | ② | Have little functions | |
| | | ③ | PRO | |
| | | ④ | Monitor 51 Club involvement
and International Quality Award | |
| | | ⑤ | Give information to convention qualifiers | |
| | | ⑥ | Reward (lunches with consultants, offer competitions) | |
| | | ⑦ | Use merit list (send letter, put leaders on front page.
Send telegrams to top producer) | |
| | | | | |
| C: | Biweekly
Management
Meeting | ① | Review previous minutes | |
| | | ② | Recruitment discussed | |
| | | ③ | Discuss business overview | a) Administration
b) Conservation |
| | | ④ | Obtain input from managers | |
| | | ⑤ | Have open discussions | a) Not conversant with rate
book
b) Low performer/persistency |
| | | ⑥ | Do training (e.g. tools) | |
| | | ⑦ | Discuss administration | |
| | | ⑧ | Provide opportunity for questions, concerns, suggestions | |
| | | ⑨ | Give feedback on regional manager meetings | |
| | | | | |
| D: | 1st line mngr
meeting (PRP) | ① | Discuss production | |
| | | ② | Discuss outstanding business | |
| | | ③ | Discuss persistency (conservation) | |
| | | ④ | Agree on action (action plan) | |
| | | ⑤ | Discuss recruiting | |
| | | ⑥ | Ask about own development | |
| | | ⑦ | Ask about concerns | |
| | | ⑧ | Focus on team | |
| | | ⑨ | Discuss personal matters (another car)
(PDA counselling) | |

- E: Financial review ① Look at what they're to get
meeting (production ② Look at statements
manager & admin. head ③ Discuss problem in paying a rep. a low
sits in) cheque
- F: Admin. Head ① Record what is to be discussed in a black book
Meeting ② Discuss key register
③ Branch information system access
④ Admin. staff
⑤ Feedback on previous items
- G: Mngr/Secretary meeting
- H: Life Underwriters Association of SA meetings
- I: Incoming mail
- J: Investigation (e.g. impact of "losing" certain people)
- K: Time on branch statistics
- L: Look at MFG (i.e. own goals and standards)
- M: Bonus structure feedback
- N: Use system to deal with things as they come in (pending/current)
- O: Look at secretaries work
- P: Discussions with OM Properties
- Q: PDA meetings
- R: Interact with Mutual & Federal, Unit Trust & SA Perm
- S: Conduct Interviews (final)
- T: Focus on Training done at RTC a) Monitor training Register
b) Talk to 1st line mngrs about training
c) Pre-training discussion with each mngr
d) Two post training projects
- U: Interviewed by HO (Marketing, Advertising, needs analysis)
- V: Checking of staff admin. ("new" admin. head)
- W: Create leads for guys
- X: Sponsorships (hand over cheque)
- Y: Look for ways of saving/cutting costs

A: Organised branch

- ① Procedures in place
- ② Way people appointed
- ③ Belief that branch should run smoothly/efficiently
- ④ Best admin. infrastructure in country (People impressed when transferred)

B: Create atmosphere/image of quality branch

C: Stable workforce (20 - 36 month category)

D: Situated in town (called CT Premier).
Pride in Branch used to be HO.

E: Good 1st line mngrs

F: Shout about successes (advertise)

G: Very service orientated (e.g. Anchor Prestige product launch)

H: Older reps. help younger reps.

TAXONOMIC ANALYSIS: BRANCH MANAGER B

Cover Term: Thing(s) done by the branch manager

- A: Walk-throughs
- ① Meet staff
 - ② Listen to ideas
 - ③ Deal with conflict
 - ④ Ammunition to go back to client
 - ⑤ Talk sport, motor cars, travel, holiday, money, family, systems and service
 - ⑥ Talk forecasts/future business
- B: Hold meetings
- ① Guidance & problem solving
 - ② Planning
 - ③ Projects (four)
 - ④ Task groups
 - ⑤ Support staff
 - ⑥ Branch/Motivational (Involves whole branch)
 - a) Start on something light
 - b) Discuss unpleasant things
 - c) Discuss admin. issues
 - d) Shows previous weeks business (negative data & positive data)
 - e) Give recognition
 - f) Further news e.g. Unit Trust
 - g) 51 Club participation and successes
 - h) Sales/Mngr of the month
 - i) Discuss problems/issues
 - j) Discuss meaningful ideas
 - k) Give information (change to procedures)
 - l) Provide ideas for marketing
 - m) Feedback on progress - branch, region & society. Targets & graphs.
 - n) Success stories
 - o) Compare competitor companies
 - ⑦ Internal quality council
- C: Spend time out of office
- 1) Head Office (small operation)
 - 2) Interest groups
 - 3) Marketing
- D: Recruitment
- E: PA and Review
- F: Provide Recognition

- G: Manage both process & people
- H: Chair disciplinary enquiry
- I: Train & develop mainly sales staff
- J: Attend self development opportunity
- K: Entertain
- L: Write business (for motivational account)
- M: Stay in touch with personal things (divorce - 3 staff). Provide support

Cover Term: Is a reason for successful branch not performing as well as it should be

- A: Lack of established sales staff
 - ① Access to upper market
 - ② Knowledge
 - ③ Skills
 - ④ Experience
 - ⑤ Confidence
- B: Not enough dynamic, efficient 1st line managers
- C: Loss of unsuccessful sales staff - creates confidence problem (young reps)
- D: No productive work ethic in all teams

Componential analysis: branch manager A

Paradigm worksheet: Thing(s) done by the branch manager

DIMENSIONS OF CONTRAST

Contrast Set	Recruitment + retaining staff	Measuremen t of fin. results + achievements	Training motivation + coaching	Secretarial work + admin. head	Activities outside office	Rep. activities (to bring results)	Deal with expenses (tightening)	Investigate / Analysis	Meetings	Associate company + other contact	Kinds of things like best	Consider most important
Walk about ("pro")			Yes		Yes	Yes					4	1
Motivate			Yes		Yes	Yes					3	2
Bi-weekly mngr meeting						Yes			Yes		2	3
1st line mngr meeting						Yes	Yes		Yes		1	4
Financial review meeting		Yes					Yes		Yes		11	5
Admin. Head meeting			Yes	Yes					Yes		9	7
Mngr + secretary meeting				Yes			Yes		Yes		10	6
Life underwriting ass. meeting									Yes	Yes	25	22
Incoming mail				Yes				Yes			20	20
Investigation (s)	Yes						Yes	Yes			18	12
Time on br statistics		Yes					Yes	Yes			17	14
Look at MFG (goals)		Yes	Yes					Yes			19	10
Bonus structure feedback		Yes					Yes	Yes			8	17
Pending / current systems				Yes			Yes	Yes			23	25
Look secretaries work			Yes	Yes				Yes			22	19
Discussions with OM properties						Yes	Yes			Yes	24	24
PDA meetings	Yes		Yes						Yes		13	16
Interact- } M+F } Unit Trust } SA Perm					Yes					Yes	14	18
Conduct interviews		Yes	Yes					Yes			5	11
Focus on training			Yes			Yes		Yes			6	8
H.O. interviews	Yes				Yes						21	23
Staff admin checking ("View new admin head")	Yes		Yes					Yes			15	15
Leads for guys	Yes				Yes	Yes					7	9
Sponsorships			Yes		Yes					Yes	12	24
Ways of saving / cutting costs		Yes					Yes	Yes			16	13
Frequency	5	6	10	5	6	7	9	11	7	4		

Componential analysis: branch manager A**Paradigm worksheet:
Is a reason for successful branch**

Contrast Set	Relates to service, care organisation	Organisation	Branch structure and management	Workforce outcome	Related to reps.	Service, quality, image	Consider important/ priority
Organised Branch	Yes	Yes	Yes				3
Create Atmosphere/ image of quality branch	Yes					Yes	5
Stable workforce		Yes		Yes	Yes		1
Situated in town (Pride ⇒ H.O.)			Yes	Yes		Yes	8
Good 1st Line mngt.		Yes	Yes	Yes			2
Shout successes				Yes	Yes	Yes	7
Service orientated	Yes					Yes	4
Older reps. help younger reps.				Yes	Yes	Yes	6

Componential analysis: branch manager B**Paradigm worksheet:****Thing(s) done by the branch manager**

Contrast Set	Must make it happen. Take definite decision	Proactive, from personal idea or liaison with others	Non-stop. Done on continuous basis	Purely on Request	Procurement of new business	Depending on situation. Close or not so close liaison	Maintenance	Distant from my people	Close interaction with own people	Kinds of things like best	Consider most important (priority)
Planning (individual preparation)	Yes				Yes			Yes		3	1
Walk through/ Walk about		Yes	Yes		Yes				Yes	1	2
Hold meetings	Yes					Yes	Yes			13	9
Time out of office			Yes		Yes	Yes				6	10
Recruitment	Yes	Yes			Yes	Yes				5	4
PA and review	Yes				Yes				Yes	4	2
Provide recognition		Yes	Yes		Yes				Yes	2	6
Manage process and people			Yes			Yes	Yes			8	8
Disciplinary enquiry				Yes			Yes	Yes		14	14
Train and develop (mainly sales staff)	Yes				Yes	Yes				10	5
Self development opportunities	Yes				Yes			Yes		9	12
Entertain	Yes	Yes			Yes				Yes	7	11
Write business	Yes				Yes			Yes		13	12
Personal / support			Yes				Yes		Yes	11	7
Frequency	8	4	5	1	10	5	4	4	5		

Componential analysis: branch manager B

Paradigm worksheet:

**Is a reason for branch not performing as it
should be**

DIMENSIONS OF CONTRAST						
Contrast set	Has to do with profile of branch (total make-up)	Sub- managers (relates to)	Consider most important			
Lack of established sales staff	Yes		1			
Not enough dynamic, efficient 1st line managers		Yes	2			
Loss of unsuccessful sales staff (confidence)	Yes		4			
No productive work ethic		Yes	3			

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